The Plant Cell, Vol. 12, i–v, December 2000 © 2000 American Society of Plant Physiologists

Author Index

A

Abel, Steffen, 2302
Adam, Zach, 419
Adams, Sally, 2271
Adamska, Iwona, 319
Adolphs, Ruth H., 211
Afitlhile, Meshack, 2237
Afsar, Karin, 1165
Aharoni, Asaph, 647
Albert, Victor A., 1893
Allen, Nina S., 2425
Alvarez-Huerta, Mayte, 647
Amedeo, Paolo, 1165
An, Gynheung, 871
Anderberg, Robert J., 569
Andersson, Bertil, 419
André, Bruno, 291
Aro, Eva-Mari, 1769
Asai, Tsuneaki, 1811, 1823
Ashikari, Motoyuki, 1591, 2473
Ausubel, Frederick M., 1811, 1823, 2175, 2541
Avramova, Zoya V., 249
Awotunde, Olubunmi S., 165, 611
Axelsen, Kristian B., 2441

B

Baba, Tomoya, 2473
Bacic, Antony, 691, 1751
Bailey, John A., 1579
Baker, Neil, 301
Barakat, Abdelali, 1093
Barker, Laurence, 1153, 1345
Bartel, Bonnie, 2395
Bartels, Dorothea, 111
Batoko, Henri, 2201
Battey, Nick H., 1837
Baudouin, Emmanuel, 2247
Baulcombe, David C., 369, 691
Beals, Thomas P., 1041
Beaudoin, Nathalie, 1103
Becker, Jeffrey M., 2295
Beeckman, Tom, 35
Beevers, Leonard, 493
Benfey, Philip N., 1307
Benghezal, Mohammed, 1179
Bennetzen, Jeffrey L., 249, 1021
Betz, Christian, 1849
Beven, Alison F., 1679
Beyerly, John, 1467
Bhakta, Amit V., 1319
Biddle, Phyllis, 381
Biesgen, Christian, 1041
Biesteiner, Dieter, 1467
Binarová, Pavla, 433
Bittner, Florian, 2455
Blaas, Jan, 647
Blanc, Guillaume, 1093
Blázquez, Miguel, 2302
Bleecker, Anthony B., 183
Blount, Jack, 2383
Blume, Beatrix, 1425
Boerjan, Wout, 35
Bögre, László, 433, 2247
Boller, Thomas, 1783
Bollman, Gabi, 2455
Bonham, Connie, 949
Boone, James D., 1041
Borevitz, Justin O., 2383
Boston, Rebecca S., 739
Boutry, Marc, 535, 2129
Bouwmeester, Harro J., 647
Bowen, Ben, 65
Bowers, John E., 1523
Bowles, Dianna, 2297
Bracha, Keren, 1257
Brandl, Birgit, 291
Braun, Sigurd, 1939
Breeden, David, 2283
Brinkmann, Henner, 2455
Brisson, Normand, 1477
Brown, Spencer, 97
Bruce, Wesley B., 65, 1307
Bryan, Gregory T., 2033
Buchala, Antony, 721
Büche, Claudia, 547
Bunge, Matilde M., 1203
Bunney, Tom D., 1679
Bürkle, Lukas, 291
Burow, Mark D., 1523
Burton, Rachel A., 691
Buschmann, Henrik, 1345
Butler, Juliet, 493
Byers, Breck, 1551

C

Cabanes-Macheteau, Marion, 739
Caboche, Michel, 1863
Cahoon, A. Bruce, 559
Cai, Giampiero, 1719
Cao, Dongsun, 199
Cao, Xiaofeng, 493
Cappadocia, Mario, 313
Cardinale, Francesca, 2247
Carey, Charles C., 2101
Carrington, James C., 569
Carter, Crystal N., 2425
Casal, Jorge J., 1203
Casselman, Amy L., 23
Catoira, Romy, 1647
Cavell, Alison C., 1961
Cenklová, Věra, 433
Cerdán, Pablo D., 1203
Cessna, Stephen G., 2191
Chabouté, Marie-Edith, 1987
Chandler, Vicki L., 2101
Chang, Yu-min, 1031
Chapple, Clint, 1295
Charlesworth, Deborah, 309
Chau, Samantha, 2001
Chaubet-Gigot, Nicole, 1987
Chen, Alexander, 265
Cheng, Chi-Lien, 199
Chisholm, Stephen T., 569
Cho, Moo Je, 1393
Cho, Yong-Gu, 871
Choi, Yeonhee, 2367
Chopra, Surinder, 2311
Chory, Joanne, 2485
Chua, Nam-Hai, 465, 1137, 2047
Chumley, Forrest G., 2019
Chung, Woo Sik, 1393
Chung, Yong-Yoon, 871
Clarke, Joseph D., 2175
Clément, Bernadette, 1987
Cobbett, Christopher S., 97
Cohen, Gal, 2367
Collings, David A., 2425
Comai, Luca, 1551
Conner, Joann A., 23
Cook, Douglas, 1647
Cooke, Richard, 1093
Cooley, Michael B., 663
Coughlan, Sean, 2219
Coupland, George, 885
Crasta, Oswald, 65
Crawford, Nigel M., 1491
Creelman, Robert A., 1633
Creissen, Gary, 301
Cresti, Mauro, 1719
Culligan, Kevin M., 991
Currie, Graeme, 1751
Cusumano, Joanne C., 1295
Cutler, Sean, 1117
Czarnecka-Verner, Eva, 125

D

Dai, Ya, 405
Dalmay, Tamas, 369
Damond, Martine, 707
Dangl, Jeffery, 2302
Davies, William, 2297
Davis, Frank M., 1031
Davis, Keith R., 1633
Davis, Ronald W., 647
Debeaujon, Isabelle, 1863
de Billy, Francoise, 1647
DeLong, Catherine, 279
Delseny, Michel, 1093
Dénarié, Jean, 1647
Denecke, Jürgen, 1517, 2219
Deng, Xing Wang, 2302
De Rycke, Riet, 35
Desnos, Thierry, 2409
Després, Charles, 279, 1477
Desprez, Thierry, 2409
Desveaux, Darrell, 1477
Devlin, Paul F., 2499
Devos, Katrien M., 637
De Vos, Ric C. H., 647
de Vries, Sacco, 461
Deyholos, Michael K., 1799
Dickey, Lynn F., 1213
Dickinson, Hugh G., 2271
Dickman, Martin B., 2191
Diehn, Scott, 1307
Dielen, Vincent, 535
Diener, Andrew C., 853
Dixon, Richard A., 1689, 2383
Dobrowolska, Grażyna, 165, 611
Dodds, Peter N., 1367
Dolan, Liam, 1961
Doležel, Jaroslav, 433
Donaldson, Gail K., 2033
Dong, Xinnian, 2175, 2339
Dooner, Hugo K., 677
Döring, Pascal, 265
Dorweiler, Jane E., 2101
Dráber, Pavel, 433
Draye, Xavier, 1523
Drøbak, Bjørn K., 583, 1679
Duby, Geoffrey, 2129
Dudareva, Natalia, 949
Dudler, Robert, 519
Dufresne, Marie, 1579
Durrant, Wendy E., 963

E

Eckard, Kathleen J., 151
Eckardt, Nancy A., 2009, 2013, 2299

Eilers, Thomas, 2455
Ellis, Jeffrey G., 1367
Ellis, T. H. Noel, 1279
Elomaa, Paula, 1893
Elsik, Christine G., 1523
Eklöf, Staffan, 2247
Emons, Anne Mie C., 1239
Engler, Gilbert, 35
Essers, Lutz, 211

F

Fagard, Mathilde, 2409
Fan, Weihua, 2339
Fang, Su-Chiung, 183
Fankhauser, Christian, 2485
Farmer, Edward E., 707
Farrall, Leonard, 2019, 2033
Faulk, Kristina N., 2033
Faye, Loïc, 739, 1519
Fedoroff, Nina, 2351
Felix, Georg, 1783
Fermin, John, 301
Fernandez, Donna E., 183
Fernández, Emilio, 1441
Fiebig, Aretha, 2001
Fincher, Geoffrey B., 691
Findlay, Kim, 691
Fink, Gerald R., 853
Finkelstein, Ruth R., 599
Fischer, Robert L., 2001, 2271, 2367
Flügge, Ulf-Ingo, 787
Fobert, Pierre R., 279
Folkerts, Otto, 65
Frank, Wolfgang, 111
Franklin, F. Christopher H., 305
Franklin-Tong, Vernonica E., 305, 1239
Franks, Robert G., 1879
Fransz, Paul, 1165
Friso, Giulia, 319
Frohnmeyer, Hanns, 1939
Frommer, Wolf B., 291, 1153, 1345
Fry, Stephen C., 1229
Fryer, Michael, 301
Fujimoto, Susan Y., 393
Fujioka, Shozo, 1591
Fukazawa, Jutarou, 901
Fukui, Kiichi, 917
Furuya, Masaki, 1063, 1939
Fuse, Takuichi, 2473

G

Gadea, José, 343
Gale, Mike D., 637
Galera, Christine, 1647
Gallie, Daniel R., 1213
Galván, Aurora, 1441
Gambellini, Gabriella, 1719
Garnaat, Carl, 65
Gaymard, Frédéric, 837
Gebhardt, Christiane, 1153
Geiger, Donald, 787
Geisler, Markus, 2441
Geisler, Matt, 2075
Geitmann, Anja, 1239, 1513, 2295
Ghassemian, Majid, 1117
Gibeaut, David M., 691
Gillikin, Jeffrey W., 739
Gillissen, Bernd, 291
Giovannoni, James, 23
Giraudat, Jérôme, 1103
Glaze, Sarah, 279
Goh, Chong Jin, 2143
Goldberg, Robert B., 1041, 2367
Gomès, Eric, 2441
Gomord, Véronique, 739, 1519
Gorenstein, Nina, 949
Gosti, Françoise, 1103
Goubet, Florence, 2409
Gough, Clare, 1647
Gourlay, Campbell W., 1279
Graham, Ian, 2302
Graves, Kathryn, 885
Gray, John C., 1927
Grebe, Markus, 343
Grierson, Claire S., 1961
Grõner, Ferdi, 787
Gross, Andrea, 2247
Gruissem, Wilhelm, 1257, 1267
Gu, Yong-Qiang, 771
Guegler, Karl, 1491
Guis, Monique, 647
Gurley, William B., 457, 125
Guyot, Romain, 1093

H

Halfter, Ursula, 1667
Hamilton, Andrew, 369, 691
Hammond-Kosack, Kim E., 963
Han, Sang-Jo, 2061
Han-yama, Atsushi, 1903
Hanzawa, Hiroko, 1063
Harada, John, 2302
Harada, John J., 2367
Harmer, Stacey L., 613
Harper, Jeffrey F., 1393
Harper, Reneé M., 757
Hause, Bettina, 433
Havelda, Zoltan, 1975
Hawes, Chris, 2201
Hays, John B., 991
He, Xian-Zhi, 1689
He, Yikun, 405
Heard, Jacqueline E., 1811, 1823
Heath, I. Brent, 1513, 2295
Hebbeker, Ulrike, 787
Heck, Gregory R., 183
Heilmann, Ingo, 1511
Helariutta, Yrjo, 1307
Hellmann, Hanjo, 1153
Heo, Won Do, 1393
Hepler, Peter K., 979
Hernandez, Luis E., 1679
Hershey, Howard P., 2033
Heslop-Harrison, J. S., 617
Hidema, Jun, 1569
Hildebrand, David F., 2237
Hille, Diana, 787
Hillmer, Stefan, 2219
Hirner, Brigitte, 1153
Hirochika, Hirohiko, 357, 2511
Hirt, Heribert, 1467, 2247
Hisada, Akiko, 1063
Hofer, Julie M. I., 1279
Höfte, Herman, 2409
Hollick, Jay B., 2101
Holmes-Davis, Rachel, 1551
Homann, Ulrike, 1127
Hong, Namgi, 817
Hong, Suk-Whan, 479
Howell, Stephen H., 2297
Hundal, Torill, 419
Hwang, Chin-Feng, 1319

I

Igeño, M. Isabel, 885
Ihara, Yoshihisa, 1591
Imaizumi, Takato, 81
Inzé, Dirk, 97
Ishida, Sarahmi, 901
Ishiguro, Sumie, 225
Ishii, Tadasha, 817
Ishitani, Manabu, 1667
Isogai, Akira, 917
Ito, Toshiro, 1541
Itoh, Jun-Ichi, 2161
Iwabuchi, Masaki, 1903
Iwai, Takayoshi, 917
Iwano, Megumi, 917

J

Jacobsen, Steven E., 1607
Jakobsen, Mia Kyed, 2441
Jang, Seonghoe, 871
Jansen, Ritsert C., 647
Jasencakova, Zuzana, 2087
Jauh, Guang-Yuh, 151
Jeon, Jong-Seong, 871
Jia, Yulin, 2033
Jiang, Chun-Xiao, 1523
Johnson, Kim L., 1751
Jonak, Claudia, 1467
Jond, Clarisse, 1863
Jones, David A., 1179
Jones, Jonathan D. G., 803, 963
Jones, Jonathan, 2302
Journet, Etienne-Pascal, 1647
Joyeux, Alexandre, 1477
Jung, Jee, 1307
Jürgens, Gerd, 343, 827

K

Kachroo, Pradeep, 663, 677
Kakutani, Tetsuji, 357
Kalume, Dário Eluan, 319
Kamiya, Yuji, 901, 1117
Kanegae, Takeshi, 81
Kangasjärvi, Jaakko, 1849
Katagiri, Fumiaki, 2541
Katayose, Yuichi, 2473
Katsar, Catherine Susan, 1523
Katz, Anat, 2367
Katz, Aviva, 2367
Kawaide, Hiroshi, 1117
Kawano, Tomonori, 1331
Kay, Steve A., 613, 2499
Keizer, Leopold C. P., 647
Kerkmann, Katja, 111
Kermicle, Jerry L., 2101
Kettunen, Reetta, 1849
Kieber, Joseph J., 443
Kiegerl, Stefan, 2247
Kientz, Marika, 343
Kim, Chanhong, 871
Kim, Cheol-Soo, 1667
Kim, Jong Cheol, 1393
Kim, Min Chul, 1393
Kim, Seong-Ryong, 871
Kim, Woon Bong, 1393
Kim, Yeon-Ki, 1331
Kim, Young-Mi, 2061
Kinet, Jean-Marie, 535
Kinkema, Mark, 2339
Kinoshita, Tetsu, 2367
Kish, Christine M., 949
Kistner, Catherine, 265
Kitano, Hidemi, 1591, 2161
Klessig, Daniel F., 165, 611, 663, 677
Klink, Vincent P., 1879
Koes, Ronald, 1619
Kofler, Heike, 787
Kolattukudy, Pappachan, 721, 1331
Kolosova, Natalia, 949
Koncz, Csaba, 343
Kost, Benedikt, 1137
Kotilainen, Mika, 1893

Kovar, David R., 583
Kovtun, Yelena, 1823
Kretsch, Thomas, 547
Krizek, Beth A., 1357, 1607
Kubátová, Elena, 433
Kubo, Kenneth M., 2101
Kuhlemeier, Cris, 507
Kühn, Christina, 291, 1153, 1345
Kular, Baldeep, 301
Kulukian, Anita, 1267
Kumagai, Tadashi, 1569
Kunkel, Tim, 2047
Kunze, Reinhard, 211
Kuper, Jochen, 2455

L

LaBrie, Samuel T., 1491
Lacombe, Benoît, 837
Lalonde, Sylvie, 1345
Lamb, Chris, 2383
Lan, Tien-Hung, 1523
Langebartels, Christian, 1849
Langin, Thierry, 1579
Lasswell, Jamie, 2395
Laurie, Steven, 2529
Lawrence, Gregory J., 1367
Leborgne-Castel, Nathalie, 739
Ledford, Heidi, 2175
Lee, Hyung-il, 1633
Lee, Pei Yun, 1041
Lee, Sang Hyoung, 1393
Lee, Sang-Hee, 871
Lee, Sichul, 871
Lee, Yeon Hee, 871
Lehfeldt, Claus, 1295
Leister, R. Todd, 2541
Lepiniec, Loïc, 1863
Lerouge, Patrice, 739
LeVesque, Cynthia S., 1409
Leyland, Nicola, 301
Li, Daoxin, 1331
Li, Haoxia, 853
Li, Hsou-min, 1951
Li, Jiayang, 405
Lim, Chae Oh, 1393
Lim, Jun, 1307
Lin, Lei, 1031
Lin, Yann-Rong, 1523
Lin, Yun, 199
Lindahl, Marika, 419
Lindquist, Susan, 479
Ling, Jun, 1213
Liscum, Emmanuel, 757
Liu, Chun-ming, 1379
Liu, Enwu, 279
Liu, Jiping, 1667
Liu, Xinfang, 405
Liu, Zhongchi, 1879
Liwosz, Aneta, 2247
Lloyd, Alan, 519
Lomonossoff, George P., 1679
Lord, Elizabeth M., 151, 1737
Lotan, Ofra, 2367
Low, Philip S., 2191
Loyall, Linda, 1939
Lu, Cheng, 2351
Luck, Joanne E., 1367
Luesse, Darron R., 757
Lutes, Jason, 2485
Luthe, Dawn S., 1031
Luu, Doan Trung, 313
Lyck, Ruth, 265
Lynch, Tim J., 599
Lynn, David G., 1455
Lysák, Martin, 433

M

Macias, Anthony, 1357
Maillet, Fabienne, 1647
Majeran, Wojciech, 137
Mandel, Therese, 507
Mann, Craig J., 949
Mariani, C., 1795
Martin, Gregory B., 771, 2323
Martinez-Vilchez, Immaculada M., 1229
Mathur, Jaideep, 465
Matsuoka, Ken, 181
Matsuoka, Makoto, 1591, 2161
Matton, Daniel P., 313
Mauch-Mani, Brigitte, 2119
Maughan, Spencer C., 97
Maule, Andrew J., 1975
May, Mike J., 97
May, Timo, 53
Mayda, Esther, 2119
Mayfield, Jacob A., 2001
McAdams, Sean A., 2033
McCann, Maureen, 2409
McCourt, Peter, 1117
McElver, John, 1379
Meindl, Thomas, 1783
Meinke, David, 1379
Meister, Armin, 2087
Mendel, Ralf R., 2455
Meshi, Tetsuo, 1903
Meskiene, Irute, 2247
Métraux, Jean-Pierre, 721
Meyer, Knut, 1295
Meyerowitz, Elliot M., 1541, 1607
Michard, Erwan, 837
Mikołajczyk, Monika, 165, 611
Miley, Natasha L., 2001
Miller, Janice G., 1229
Mindrinos, Michael N., 2485
Ming, Reiguang, 1523
Mitra, Anurina, 1031
Moda, Ichiro, 1903
Mol, Jos, 647
Mol, Joseph N. M., 1619
Mollet, Jean-Claude, 151, 1737
Monforte, Antonio J., 2283
Monna, Lisa, 2473
Moore, Ian, 2201
Morisawa, Gaku, 1903
Morra, Marc R., 2259
Morris, T. Jack, 1917
Morse, David, 313
Moscatelli, Alessandra, 1719
Mou, Zhonglin, 405
Mouille, Gregory, 2409
Movafeghi, Ali, 2219
Mueller, Elisabeth, 369
Mulineaux, Phillip, 301
Mullet, John E., 1633
Munnik, Teun, 111
Murfitt, Lisa M., 949
Muroy, Sandra, 97
Muszyńska, Grażyna, 165, 611
Muto, Hideki, 757

N

Nadeau, Jeanette, 2075
Nagamura, Yoshiaki, 2473
Nagatani, Akira, 1063
Nagato, Yasuo, 2161
Naider, Fred, 2295
Nakajima, Nobuyoshi, 917
Nakashima, Kazuo, 2367
Nam, Jongmin, 871
Nambara, Eiji, 1117
Nasrallah, June B., 23
Nasrallah, Mikhail E., 23
Nass, Norbert, 1425
Nawrath, Christiane, 721
Nelson, David C., 2395
Nerlich, Andrea, 2455
Nes, W. David, 853
Nesi, Nathalie, 1863
Newbigin, Ed, 310
Nilsson, Frederik, 319
Nilsson, Ove, 2302
Nishimura, Mikio, 2297
Nishizawa, Naoko, 1137
Niu, Qi-Wen, 1137
Noguchi, Takahiro, 1591
Nothnagel, Eugene A., 151, 1737
Nover, Lutz, 265
Nürnberger, Thorsten, 1425

O

O'Connell, Ann P., 647
Oefner, Peter J., 2485
Ogawa, Tomoya, 817
Ohad, Nir, 2367
Ohashi, Yuko, 917
Ohme-Takagi, Masaru, 393
Ohta, Masaru, 393
Okada, Kiyotaka, 225
Okamoto, Hiroyuki, 357
Okamoto, Masaji, 917
O'Malley, Ronan C., 1455
Onouchi, Hitoshi, 885
Oppenheim, Amos B., 419
Orbach, Marc J., 2019
Ortega, Jimena, 1203
Otegui, Marisa, 933
Overmyer, Kirk, 1849
Ovidi, Elisa, 1719

P

Paakkarinen, Virpi, 1769
Pagny, Sophie, 739
Palmgren, Michael Gjedde, 2441
Pan, Songqin, 125
Park, Chan Young, 1393
Park, Hyeong Cheol, 1393
Park, Sang-Youl, 151, 1737
Parker, Jill S., 1961
Pastori, Gabriela, 301
Paszkowski, Jerzy, 1165
Paterson, Andrew H., 1523
Pathirana, Sudam, 663
Patterson, Sara E., 183
Patton, David, 1379
Peart, Jan, 1679
Pechan, Tibor, 1031
Pelletier, Georges, 1863
Pellier, Anne-Laure, 1579
Peltier, Jean-Benoît, 319
Penmetsa, R. Varma, 1647
Perera, Imara Y., 1511
Perfect, Sarah, 1579
Périlleux, Claire, 885
Perring, Thomas M., 1409
Perry, Sharyn E., 183
Peterson, Thomas, 2311
Petty, Ian T. D., 2259
Philipps, Gabriel, 1987
Piedras, Pedro, 803, 963
Pilot, Guillaume, 837
Pimpl, Peter, 1517, 2219
Poppe, Christoph, 547
Preuss, Daphne, 2001
Prost, Valerie, 1357
Pudlo, Waclawa M., 1319
Purnelle, Bénédicte, 2129

Q

Qu, Feng, 1917
Quatrano, Ralph S., 2297
Quattrocchio, Francesca, 1619
Queitsch, Christine, 479

R

Rafalski, Antoni, 381
Rahfeld, Jens-Ulrich, 343
Raikhel, Natasha V., 2297
Raizada, Manish N., 5
Rajagopal, Asha, 519
Rao, Mulpuri V., 1633
Ratcliffe, Oliver J., 315
Rayon, Catherine, 2409
Reddy, Anireddy S. N., 979
Refregier, Guislaine, 2409
Reichheld, Jean-Philippe, 97
Reid, James B., 1063
Reinhardt, Didier, 507
Ren, Tao, 1917
Rentsch, Doris, 291
Rexach, Jesus, 1441
Reymond, Philippe, 707
Reynolds, Helen, 301
Reynolds, Steven H., 1551
Richards, Daniel, 2485
Richards, Eric J., 1003
Riechmann, Jose Luis, 315
Rink, Jochen C., 2425
Roberts, Keith, 691, 1961
Robinson, David G., 2219
Rodriguez-Batiller, María J., 1203
Rodríguez-Concepción, Manuel, 1257, 1267
Roepstorff, Peter, 319
Rogers, John C., 493
Rogers, Sally W., 493
Rogg, Luise E., 2395
Rohde, Antje, 35
Romagnoli, Silvia, 1719
Romeis, Tina, 803
Rongey, Catherine, 2395
Roossinck, Marilyn J., 1079
Rosenberg, Charles, 1647
Roth, Brad, 65
Roux, Stanley J., 519
Rowland, Owen, 963
Ruegger, Max O., 1295
Rumbaugh, Michael, 1379
Running, Mark, 829
Russinova, Eugenia, 461
Ryser, Ulrich, 721

S

Sack, Fred D., 2075
Safadi, Farida, 979
Sakai, Hajime, 1607
Sakai, Tatsuya, 225, 901
Salamini, Francesco, 111
Salchert, Klaus, 343
Sánchez, Rodolfo A., 1203
Sandermann, Heinrich, Jr., 1849
Sanders, Paul M., 1041
Sasaki, Takuji, 2473
Scanlon, Mike, 829
Schäfer, Eberhard, 547
Scheel, Dierk, 1425
Scheid, Ortrun Mittelsten, 1165
Schena, Mark, 647
Schorderet, Martine, 721
Schubert, Ingo, 2087
Schultz, Carolyn J., 1751
Schulz, Alexander, 1153
Schulze, Jutta, 2455
Schulze, Waltraud, 1153
Schwarz, Günter, 2455
Scott, Amie C., 2425
Scott, Rod J., 2271
Scott-Craig, John S., 237
Sears, Valerie E., 2191
Seeley, Kevin A., 97
Sekine, Masami, 1987
Sentenac, Hervé, 837
Seo, Shigemi, 917
Serizet, Carine, 1103
Servaites, Jerome C., 787
Shah, Jyoti, 677
Shan, Libo, 2323
Shanks, Mike, 1679
Shaw, Peter J., 1679
Sheen, Jen, 1823
Shepherd, Kenneth W., 1367
Shevell, Diane E., 2047
Shi, Weiming, 1667
Shibuya, Naoto, 817
Shinshi, Hideaki, 393
Shirley, Amber M., 1295
Sieber, Patrick, 721
Sieburth, Leslie E., 1799
Siligan, Christine, 2247
Sims, Lynne, 1307
Singhal, Anu, 23
Sinha, Neelima, 829
Smith, Harry B., 2, 179, 304
Snowman, Benjamin N., 1239
Soh, Moon-Soo, 2061
Soll, Jürgen, 53
Song, Pill-Soon, 2061
Song, Wei, 2295
Specht, Chelsea D., 1307
Spelt, Cornelis, 1619
Spetea, Cornelia, 419
Spiegelman, Jamie I., 2485
Spielman, Melissa, 2271
Springer, Patricia S., 1007
Stacey, Gary, 2295
Staehelin, L. Andrew, 933
Staiger, Christopher J., 583
Staneloni, Roberto J., 1203
Steffens, John C., 1253, 2283
Steimer, Andrea, 1165
Steiner, Henry-York, 2295
Steinmann, Thomas, 343
Stevens, Yvonne, 1551
Stevenson-Paulik, Jill, 1511
Stokes, Trevor L., 1003
Stone, Julie M., 1811, 1823
Stowe-Evans, Emily L., 757
Strack, Dieter, 1295
Subramaniam, Rajagopal, 1477
Sugimoto, Kazuhiko, 2511
Sullivan, James A., 1927
Sun, Zhongkui, 647
Sung, Zinmay R., 97
Sutherland, Betsy M., 1569
Sutter, Jens-Uwe, 1127
Sweigard, James A., 2019

T

Takahashi, Yohsuke, 901
Takatsuto, Suguru, 1591
Takeda, Shin, 2511
Talbot, Nicholas J., 1703
Tamai, Atsushi, 1903
Tang, Xiaoyan, 2323
Tanguay, Robert L., 1213
Tanksley, Steven D., 2283
Tao, Yi, 2541
Tarchini, Renato, 381, 2033
Tatematsu, Kiyoshi, 757
Taylor, Neil G., 2529
Teeri, Teemu H., 1893
Thara, Venkatappa K., 771, 2323
Thibaud, Jean-Baptiste, 837
Thiel, Gerhard, 1127
Thines, Eckhard, 1703
Thomas, Collin, 519
Thompson, William F., 1213
Tiezzi, Antonio, 1719
Tikhonov, Alexander P., 249
Till, Sandra, 2247
Timko, Michael P., 559
Tingey, Scott, 381
Toledo-Ortiz, Gabriela, 1257
Tonukari, Nyerhovwo J., 237
Tooke, Fiona, 1837
Treuter, Eckardt, 265
Truesdell, Gina M., 1319
Tu, Shuh-Long, 1951
Tuominen, Hannele, 1849
Turner, Bryan M., 2087
Turner, Simon R., 2529
Tyagi, Anand P., 1551

U

Uchida, Kenko, 1939
Uimari, Anne, 1893
Umehara, Yosuke, 2473
Usui, Akemi, 393
Uyenoyama, Marcy K., 310

V

Valent, Barbara, 2019, 2033
Vallon, Olivier, 137
van der Hoeven, Rutger S., 2283
van der Voet, Hilko, 647
van de Ven, Wilhelmina T. G., 1409
van Houwelingen, Adèle M. M. L., 647
Van Montagu, Marc, 35, 97
van Tunen, Arjen J., 647
van Wijk, Klaas Jan, 319, 1769
Vera, Pablo, 2119
Verbelen, Jean-Pierre, 1229
Verhoeven, Harrie A., 647
Vernhettes, Samantha, 2409
Vernoux, Teva, 97
Vierling, Elizabeth, 479
Viitanen, Paul V., 1295
Vinkenoog, Rinke, 2271
Vissenberg, Kris, 1229
Volko, Sigrid M., 2175
Vos, Jan W., 979
Vrebalov, Julia, 23

W

Wada, Masamitsu, 81
Wada, Takuji, 225
Walbot, Virginia, 5
Walling, Linda L., 151, 1409
Walter, Joachim, 2087
Walton, Jonathan D., 237
Wang, Cunxi, 2237
Wang, Rongchen, 1491
Wang, Xuemin, 2237
Wang, Yingchun, 2129
Ward, John M., 1153, 1345
Wasteneys, Geoffrey O., 1179
Watahiki, Masaaki K., 757
Watkins, Peter A. C., 1679
Weber, Andreas, 787
Weber, Hans, 707
Weber, Roland W. S., 1703

Weiler, Elmar W., 1041
Weise, Andreas, 1153, 1345
Wellburn, Alan, 301
Wellburn, Florence, 301
Weller, James L., 1063
Wells, Douglas R., 1213
Welti, Ruth, 2237
Whitham, Steven A., 569
Whoriskey, Wendy J., 853
Williams, W. Paul, 1031
Williamson, Valerie Moroz, 1319
Wilson, Robert C., 97
Windsor, Brian, 519
Wineland, Robin, 381
Winter, Ken, 1551
Woeste, Keith E., 443
Wollman, Françis-André, 137
Wolters-Arts, M., 1795
Wood, Karl, 949
Wright, Robert J., 1523
Wu, Hui-Ju, 663
Wu, Kun-Sheng, 2033
Wu, Xiong, 1591
Wu, Yan, 1137
Wyatt, Sarah E., 2425

X

Xia, Yiji, 2383
Xu, Ping, 1079

Y

Yadegari, Ramin, 2367
Yalovsky, Shaul, 1257, 1267
Yamada, Akira, 817
Yamaguchi, Isomaro, 901
Yamaguchi, Takeshi, 817
Yamamotc, Kimiko, 2473
Yamamoto, Kotaro, 757
Yamamuro, Chizuko, 1591
Yamanouchi, Utako, 2473
Yang, Caimei, 771
Yang, Li Jun, 1379
Yang, Shu Hua, 2143
Yano, Masahiro, 2473
Ye, Lijun, 1031
Yorgey, Peter, 1823
Yoshioka, Keiko, 677
Young, Carolyn A., 1267
Yu, Deyue, 1893
Yu, Hao, 2143
Yuan, Fenghua, 2541

Z

Zhang, James Z., 315
Zhang, Larry, 2295
Zhang, Lixin, 1769
Zhang, Peifen, 2311
Zhao, Rongmin, 535
Zheng, Huan-Quan, 2201
Zhou, Jianmin, 771
Zhou, Jian-Min, 2323
Zhou, Wen-xu, 853
Zhu, Jian-Kang, 1667
Zien, Christopher A., 2237
Zuo, Jianru, 1137

The Plant Cell, Vol. 12, vii–xxxviii, December 2000 © 2000 American Society of Plant Physiologists

Subject Index

A

***ABI5* gene**
R. R. Finkelstein and T. J. Lynch: The Arabidopsis Abscisic Acid Response Gene *ABI5* Encodes a Basic Leucine Zipper Transcription Factor, 599–609

Abscisic acid
N. Beaudoin, C. Serizet, F. Gosti, and J. Giraudat: Interactions between Abscisic Acid and Ethylene Signaling Cascades, 1103–1115
R. R. Finkelstein and T. J. Lynch: The Arabidopsis Abscisic Acid Response Gene *ABI5* Encodes a Basic Leucine Zipper Transcription Factor, 599–609
W. Frank, T. Munnik, K. Kerkmann, F. Salamini, and D. Bartels: Water Deficit Triggers Phospholipase D Activity in the Resurrection Plant *Craterostigma plantagineum*, 111–123
M. Ghassemian, E. Nambara, S. Cutler, H. Kawaide, Y. Kamiya, and P. McCourt: Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in Arabidopsis, 1117–1126
C. Lu and N. Fedoroff: A Mutation in the Arabidopsis *HYL1* Gene Encoding a dsRNA Binding Protein Affects Responses to Abscisic Acid, Auxin, and Cytokinin, 2351–2365
A. Rohde, R. De Rycke, T. Beeckman, G. Engler, M. Van Montagu, and W. Boerjan: ABI3 Affects Plastid Differentiation in Dark-Grown Arabidopsis Seedlings, 35–52

Abscission
D. E. Fernandez, G. R. Heck, S. E. Perry, S. E. Patterson, A. B. Bleecker, and S.-C. Fang: The Embryo MADS Domain Factor AGL15 Acts Postembryonically: Inhibition of Perianth Senescence and Abscission via Constitutive Expression, 183–197

Acetylation
Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100

***ACRE* genes**
W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977

Actin
A. Geitmann, B. N. Snowman, A. M. C. Emons, and V. E. Franklin-Tong: Alterations in the Actin Cytoskeleton of Pollen Tubes Are Induced by the Self-Incompatibility Reaction in *Papaver rhoeas*, 1239–1251
I. B. Heath and A. Geitmann: Cell Biology of Plant and Fungal Tip Growth, Getting to the Point (Meeting Report), 1513–1517. Correction, 2295
D. R. Kovar, B. K. Drøbak, and C. J. Staiger: Maize Profilin Isoforms Are Functionally Distinct, 583–598

Activator domains
P. Döring, E. Treuter, C. Kistner, R. Lyck, A. Chen, and L. Nover: The Role of AHA Motifs in the Activator Function of Tomato Heat Stress Transcription Factors HsfA1 and HsfA2, 265–278

***Activator* transposase**
L. Essers, R. H. Adolphs, and R. Kunze: A Highly Conserved Domain of the Maize *Activator* Transposase Is Involved in Dimerization, 211–223

Acyltransferases
A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661
C. Lehfeldt, A. M. Shirley, K. Meyer, M. O. Ruegger, J. C. Cusumano, P. V. Viitanen, D. Strack, and C. Chapple: Cloning of the *SNG1* Gene of Arabidopsis Reveals a Role for a Serine Carboxypeptidase-like Protein as an Acyltransferase in Secondary Metabolism, 1295–1306
J. C. Steffens: Acyltransferases in Protease's Clothing (In This Issue), 1253–1255

Adhesion
J.-C. Mollet, S.-Y. Park, E. A. Nothnagel, and E. M. Lord: A Lily Stylar Pectin Is Necessary for Pollen Tube Adhesion to an in Vitro Stylar Matrix, 1737–1749
C. J. Schultz, K. L. Johnson, G. Currie, and A. Bacic: The Classical Arabinogalactan Protein Gene Family of Arabidopsis, 1751–1767
D. E. Shevell, T. Kunkel, and N.-H. Chua: Cell Wall Alterations in the Arabidopsis *emb30* Mutant, 2047–2059

Adiantum capillus-veneris
T. Imaizumi, T. Kanegae, and M. Wada: Cryptochrome Nucleocytoplasmic Distribution and Gene Expression Are Regulated by Light Quality in the Fern *Adiantum capillus-veneris*, 81–95
H. B. Smith: Photoreceptors in Signal Transduction: Pathways of Enlightenment (In This Issue), 1–3

AGAMOUS
M. K. Deyholos and L. E. Sieburth: Separable Whorl-Specific Expression and Negative Regulation by Enhancer Elements within the *AGAMOUS* Second Intron, 1799–1810
D. E. Fernandez, G. R. Heck, S. E. Perry, S. E. Patterson, A. B. Bleecker, and S.-C. Fang: The Embryo MADS Domain Factor AGL15 Acts Postembryonically: Inhibition of Perianth Senescence and Abscission via Constitutive Expression, 183–197
B. A. Krizek, V. Prost, and A. Macias: *AINTEGUMENTA* Promotes Petal Identity and Acts as a Negative Regulator of *AGAMOUS*, 1357–1366

AHM1 protein
G. Morisawa, A. Han-yama, I. Moda, A. Tamai, M. Iwabuchi, and T. Meshi: AHM1, a Novel Type of Nuclear Matrix–Localized, MAR Binding Protein with a Single AT Hook and a J Domain–Homologous Region, 1903–1916

AINTEGUMENTA
B. A. Krizek, V. Prost, and A. Macias: *AINTEGUMENTA* Promotes Petal Identity and Acts as a Negative Regulator of *AGAMOUS*, 1357–1366
Z. Liu, R. G. Franks, and V. P. Klink: Regulation of Gynoecium Marginal Tissue Formation by *LEUNIG* and *AINTEGUMENTA*, 1879–1891

***AKT2/AKT3* gene**
B. Lacombe, G. Pilot, E. Michard, F. Gaymard, H. Sentenac, and J.-B. Thibaud: A Shaker-like K^+ Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis, 837–851

***ALA* genes**
E. Gomès, M. K. Jakobsen, K. B. Axelsen, M. Geisler, and M. G. Palmgren: Chilling Tolerance in Arabidopsis Involves ALA1, a Member of a New Family of Putative Aminophospholipid Translocases, 2441–2453

***alcohol dehydrogenase* genes**
R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391
A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264

Alfalfa
X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-*O*-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702
C. Jonak, D. Beisteiner, J. Beyerly, and H. Hirt: Wound-Induced Expression and Activation of WIG, a Novel Glycogen Synthase Kinase 3, 1467–1475
S. Kiegerl, F. Cardinale, C. Siligan, A. Gross, E. Baudouin, A. Liwosz, S. Eklöf, S. Till, L. Bögre, H. Hirt, and I. Meskiene: SIMKK, a Mitogen-Activated Protein Kinase (MAPK) Kinase, Is a Specific Activator of the Salt Stress–Induced MAPK, SIMK, 2247–2258

Allelism
D. P. Matton, D. T. Luu, D. Morse, and M. Cappadocia: Reply: Establishing a Paradigm for the Generation of New *S* Alleles (Letters To The Editor), 313–315
M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312
Allopolyploidy
L. Comai, A. P. Tyagi, K. Winter, R. Holmes-Davis, S. H. Reynolds, Y. Stevens, and B. Byers: Phenotypic Instability and Rapid Gene Silencing in Newly Formed Arabidopsis Allotetraploids, 1551–1567
Aminophospholipid translocases
E. Gomès, M. K. Jakobsen, K. B. Axelsen, M. Geisler, and M. G. Palmgren: Chilling Tolerance in Arabidopsis Involves ALA1, a Member of a New Family of Putative Aminophospholipid Translocases, 2441–2453
***AMT1;1* gene**
R. Wang, K. Guegler, S. T. LaBrie, and N. M. Crawford: Genomic Analysis of a Nutrient Response in Arabidopsis Reveais Diverse Expression Patterns and Novel Metabolic and Potential Regulatory Genes Induced by Nitrate, 1491–1509
***ANR1* gene**
R. Wang, K. Guegler, S. T. LaBrie, and N. M. Crawford: Genomic Analysis of a Nutrient Response in Arabidopsis Reveals Diverse Expression Patterns and Novel Metabolic and Potential Regulatory Genes Induced by Nitrate, 1491–1509
Anthocyanin
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393
***anthocyanin1* gene**
C. Spelt, F. Quattrocchio, J. N. M. Mol, and R. Koes: *anthocyanin1* of Petunia Encodes a Basic Helix-Loop-Helix Protein That Directly Activates Transcription of Structural Anthocyanin Genes, 1619–1631
APETALA1
S. Yalovsky, M. Rodríguez-Concepción, K. Bracha, G. Toledo-Ortiz, and W. Gruissem: Prenylation of the Floral Transcription Factor APETALA1 Modulates Its Function, 1257–1266
APETALA2
M. K. Deyholos and L. E. Sieburth: Separable Whorl-Specific Expression and Negative Regulation by Enhancer Elements within the *AGAMOUS* Second Intron, 1799–1810
apetala2-1
T. Ito and E. M. Meyerowitz: Overexpression of a Gene Encoding a Cytochrome P450, *CYP78A9*, Induces Large and Seedless Fruit in Arabidopsis, 1541–1550
Apical meristems
O. J. Ratcliffe, J. L. Riechmann, and J. Z. Zhang: *INTERFASCICULAR FIBERLESS1* Is the Same Gene as *REVOLUTA* (Letters To The Editor), 315–317
Apomixis
R. Vinkenoog, M. Spielman, S. Adams, R. L. Fischer, H. G. Dickinson, and R. J. Scott: Hypomethylation Promotes Autonomous Endosperm Development and Rescues Postfertilization Lethality in *fie* Mutants, 2271–2282
Appressoria
Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343
E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718
Arabidopsis
S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309
T. Asai, J. M. Stone, J. E. Heard, Y. Kovtun, P. Yorgey, J. Sheen, and F. M. Ausubel: Fumonisin B1–Induced Cell Death in Arabidopsis Protoplasts Required Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways, 1823–1835
L. Barker, C. Kühn, A. Weise, A. Schulz, C. Gebhardt, B. Hirner, H. Hellmann, W. Schulze, J. M. Ward, and W. B. Frommer: SUT2, a Putative Sucrose Sensor in Sieve Elements, 1153–1164
N. Beaudoin, C. Serizet, F. Gosti, and J. Giraudat: Interactions between Abscisic Acid and Ethylene Signaling Cascades, 1103–1115
M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201
G. Blanc, A. Barakat, R. Guyot, R. Cooke, and M. Delseny: Extensive Duplication and Reshuffling in the Arabidopsis Genome, 1093–1101
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393
C. Büche, C. Poppe, E. Schäfer, and T. Kretsch: *eid1*: A New Arabidopsis Mutant Hypersensitive in Phytochrome A–Dependent High-Irradiance Responses, 547–558
P. D. Cerdán, R. J. Staneloni, J. Ortega, M. M. Bunge, M. J. Rodriguez-Batiller, R. A. Sánchez, and J. J. Casal: Sustained but Not Transient Phytochrome A Signaling Targets a Region of an *Lhcb1*2* Promoter Not Necessary for Phytochrome B Action, 1203–1211
J. D. Clarke, S. M. Volko, H. Ledford, F. M. Ausubel, and X. Dong: Roles of Salicylic Acid, Jasmonic Acid, and Ethylene in *cpr*-Induced Resistance in Arabidopsis, 2175–2190
M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676
L. Comai, A. P. Tyagi, K. Winter, R. Holmes-Davis, S. H. Reynolds, Y. Stevens, and B. Byers: Phenotypic Instability and Rapid Gene Silencing in Newly Formed Arabidopsis Allotetraploids, 1551–1567
K. M. Culligan and J. B. Hays: Arabidopsis MutS Homologs—AtMSH2, AtMSH3, AtMSH6, and a Novel AtMSH7—Form Three Distinct Protein Heterodimers with Different Specificities for Mismatched DNA, 991–1002
T. Dalmay, A. Hamilton, E. Mueller, and D. C. Baulcombe: *Potato Virus X* Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing, 369–379
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290
P. F. Devlin and S. A. Kay: Cryptochromes Are Required for Phytochrome Signaling to the Circadian Clock but Not for Rhythmicity, 2499–2509
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646
M. K. Deyholos and L. E. Sieburth: Separable Whorl-Specific Expression and Negative Regulation by Enhancer Elements within the *AGAMOUS* Second Intron, 1799–1810
A. C. Diener, H. Li, W.-x. Zhou, W. J. Whoriskey, W. D. Nes, and G. R. Fink: *STEROL METHYLTRANSFERASE 1* Controls the Level of Cholesterol in Plants, 853–870
N. A. Eckardt: Giving Rice the Time of Day: Molecular Identification of a Major Photoperiod Sensitivity Quantitative Trait Locus (In This Issue), 2299–2301
M. Fagard, T. Desnos, T. Desprez, F. Goubet, G. Refregier, G. Mouille, M. McCann, C. Rayon, S. Vernhettes, and H. Höfte: *PROCUSTE1* Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis, 2409–2423
D. E. Fernandez, G. R. Heck, S. E. Perry, S. E. Patterson, A. B. Bleecker, and S.-C. Fang: The Embryo MADS Domain Factor AGL15 Acts Postembryonically: Inhibition of Perianth Senescence and Abscission via Constitutive Expression, 183–197
A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008
R. R. Finkelstein and T. J. Lynch: The Arabidopsis Abscisic Acid Response Gene *ABI5* Encodes a Basic Leucine Zipper Transcription Factor, 599–609
S. Y. Fujimoto, M. Ohta, A. Usui, H. Shinshi, and M. Ohme-Takagi: Arabidopsis Ethylene-Responsive Element Binding Factors

Act as Transcriptional Activators or Repressors of GCC Box–Mediated Gene Expression, 393–404
J. Fukazawa, T. Sakai, S. Ishida, I. Yamaguchi, Y. Kamiya, and Y. Takahashi: REPRESSION OF SHOOT GROWTH, a bZIP Transcriptional Activator, Regulates Cell Elongation by Controlling the Level of Gibberellins, 901–915
M. Geisler, J. Nadeau, and F. D. Sack: Oriented Asymmetric Divisions That Generate the Stomatal Spacing Pattern in Arabidopsis Are Disrupted by the *too many mouths* Mutation, 2075–2086
M. Ghassemian, E. Nambara, S. Cutler, H. Kawaide, Y. Kamiya, and P. McCourt: Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in Arabidopsis, 1117–1126
B. Gillissen, L. Bürkle, B. André, C. Kühn, D. Rentsch, B. Brandl, and W. B. Frommer: A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis, 291–300
E. Gomès, M. K. Jakobsen, K. B. Axelsen, M. Geisler, and M. G. Palmgren: Chilling Tolerance in Arabidopsis Involves ALA1, a Member of a New Family of Putative Aminophospholipid Translocases, 2441–2453
M. Grebe, J. Gadea, T. Steinmann, M. Kientz, J.-U. Rahfeld, K. Salchert, C. Koncz, and G. Jürgens: A Conserved Domain of the Arabidopsis GNOM Protein Mediates Subunit Interaction and Cyclophilin 5 Binding, 343–356
W. B. Gurley: HSP101: A Key Component for the Acquisition of Thermotolerance in Plants (In This Issue), 457–460
S. L. Harmer and S. A. Kay: Microarrays: Determining the Balance of Cellular Transcription (In This Issue), 613–615
R. M. Harper, E. L. Stowe-Evans, D. R. Luesse, H. Muto, K. Tatematsu, M. K. Watahiki, K. Yamamoto, and E. Liscum: The *NPH4* Locus Encodes the Auxin Response Factor ARF7, a Conditional Regulator of Differential Growth in Aerial Arabidopsis Tissue, 757–770
J. S. Heslop-Harrison: Comparative Genome Organization in Plants: From Sequence and Markers to Chromatin and Chromosomes, 617–635
H. Hirochika, H. Okamoto, and T. Kakutani: Silencing of Retrotransposons in Arabidopsis and Reactivation by the *ddm1* Mutation, 357–368
M. Ishitani, J. Liu, U. Halfter, C.-S. Kim, W. Shi, and J.-K. Zhu: SOS3 Function in Plant Salt Tolerance Requires N-Myristoylation and Calcium Binding, 1667–1677
T. Ito and E. M. Meyerowitz: Overexpression of a Gene Encoding a Cytochrome P450, *CYP78A9*, Induces Large and Seedless Fruit in Arabidopsis, 1541–1550
P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690
M. Kinkema, W. Fan, and X. Dong: Nuclear Localization of NPR1 Is Required for Activation of *PR* Gene Expression, 2339–2350
B. A. Krizek, V. Prost, and A. Macias: *AINTEGUMENTA* Promotes Petal Identity and Acts as a Negative Regulator of *AGAMOUS*, 1357–1366
B. Lacombe, G. Pilot, E. Michard, F. Gaymard, H. Sentenac, and J.-B. Thibaud: A Shaker-like K^+ Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis, 837–851
J. Lasswell, L. E. Rogg, D. C. Nelson, C. Rongey, and B. Bartel: Cloning and Characterization of *IAR1*, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis, 2395–2408
C. Lehfeldt, A. M. Shirley, K. Meyer, M. O. Ruegger, J. C. Cusumano, P. V. Viitanen, D. Strack, and C. Chapple: Cloning of the *SNG1* Gene of Arabidopsis Reveals a Role for a Serine Carboxypeptidase-like Protein as an Acyltransferase in Secondary Metabolism, 1295–1306
Z. Liu, R. G. Franks, and V. P. Klink: Regulation of Gynoecium Marginal Tissue Formation by *LEUNIG* and *AINTEGUMENTA*, 1879–1891
C. Lu and N. Fedoroff: A Mutation in the Arabidopsis *HYL1* Gene Encoding a dsRNA Binding Protein Affects Responses to Abscisic Acid, Auxin, and Cytokinin, 2351–2365
C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798
J. Mathur and N.-H. Chua: Microtubule Stabilization Leads to Growth Reorientation in Arabidopsis Trichomes, 465–477
E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128
J. McElver, D. Patton, M. Rumbaugh, C.-m. Liu, L. J. Yang, and D. Meinke: The *TITAN5* Gene of Arabidopsis Encodes a Protein Related to the ADP Ribosylation Factor Family of GTP Binding Proteins, 1379–1392
M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611
Z. Mou, Y. He, Y. Dai, X. Liu, and J. Li: Deficiency in Fatty Acid Synthase Leads to Premature Cell Death and Dramatic Alterations in Plant Morphology, 405–417
N. Nesi, I. Debeaujon, C. Jond, G. Pelletier, M. Caboche, and L. Lepiniec: The *TT8* Gene Encodes a Basic Helix-Loop-Helix Domain Protein Required for Expression of *DFR* and *BAN* Genes in Arabidopsis Siliques, 1863–1878
H. Onouchi, M. I. Igeño, C. Périlleux, K. Graves, and G. Coupland: Mutagenesis of Plants Overexpressing *CONSTANS* Demonstrates Novel Interactions among Arabidopsis Flowering-Time Genes, 885–900
M. Otegui and L. A. Staehelin: Syncytial-Type Cell Plates: A Novel Kind of Cell Plate Involved in Endosperm Cellularization of Arabidopsis, 933–947
K. Overmyer, H. Tuominen, R. Kettunen, C. Betz, C. Langebartels, H. Sandermann, Jr., and J. Kangasjärvi: Ozone-Sensitive Arabidopsis *rcd1* Mutant Reveals Opposite Roles for Ethylene and Jasmonate Signaling Pathways in Regulating Superoxide-Dependent Cell Death, 1849–1862
S. Pan, E. Czarnecka-Verner, and W. B. Gurley: Role of the TATA Binding Protein–Transcription Factor IIB Interaction in Supporting Basal and Activated Transcription in Plant Cells, 125–135
J. S. Parker, A. C. Cavell, L. Dolan, K. Roberts, and C. S. Grierson: Genetic Interactions during Root Hair Morphogenesis in Arabidopsis, 1961–1974
C. Queitsch, S.-W. Hong, E. Vierling, and S. Lindquist: Heat Shock Protein 101 Plays a Crucial Role in Thermotolerance in Arabidopsis, 479–492
N. V. Raikhel, M. Nishimura, R. S. Quatrano, S. H. Howell, W. Davies, and D. Bowles: The Free Flow of Ideas, Information, and Materials (Editorial), 2297
M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646
O. J. Ratcliffe, J. L. Riechmann, and J. Z. Zhang: *INTERFASCICULAR FIBERLESS1* Is the Same Gene as *REVOLUTA* (Letters To The Editor), 315–317
D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
A. Rohde, R. De Rycke, T. Beeckman, G. Engler, M. Van Montagu, and W. Boerjan: ABI3 Affects Plastid Differentiation in Dark-Grown Arabidopsis Seedlings, 35–52
E. Russinova and S. de Vries: Parental Contribution to Plant Embryos (Insight), 461–463
H. Sakai, B. A. Krizek, S. E. Jacobsen, and E. M. Meyerowitz: Regulation of *SUP* Expression Identifies Multiple Regulators Involved in Arabidopsis Floral Meristem Development, 1607–1618
T. Sakai, T. Wada, S. Ishiguro, and K. Okada: RPT2: A Signal Transducer of the Phototropic Response in Arabidopsis, 225–236
P. M. Sanders, P. Y. Lee, C. Biesgen, J. D. Boone, T. P. Beals, E. W. Weiler, and R. B. Goldberg: The Arabidopsis *DELAYED*

DEHISCENCE1 Gene Encodes an Enzyme in the Jasmonic Acid Synthesis Pathway, 1041–1061
C. J. Schultz, K. L. Johnson, G. Currie, and A. Bacic: The Classical Arabinogalactan Protein Gene Family of Arabidopsis, 1751–1767
G. Schwarz, J. Schulze, F. Bittner, T. Eilers, J. Kuper, G. Bollmann, A. Nerlich, H. Brinkmann, and R. R. Mendel: The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton, 2455–2471
D. E. Shevell, T. Kunkel, and N.-H. Chua: Cell Wall Alterations in the Arabidopsis *emb30* Mutant, 2047–2059
P. Sieber, M. Schorderet, U. Ryser, A. Buchala, P. Kolattukudy, J.-P. Métraux, and C. Nawrath: Transgenic Arabidopsis Plants Expressing a Fungal Cutinase Show Alterations in the Structure and Properties of the Cuticle and Postgenital Organ Fusions, 721–737
H. B. Smith: Signal Transduction in Systemic Acquired Resistance (In This Issue), 179–181
M.-S. Soh, Y.-M. Kim, S.-J. Han, and P.-S. Song: REP1, a Basic Helix-Loop-Helix Protein, Is Required for a Branch Pathway of Phytochrome A Signaling in Arabidopsis, 2061–2073
J. I. Spiegelman, M. N. Mindrinos, C. Fankhauser, D. Richards, J. Lutes, J. Chory, and P. J. Oefner: Cloning of the Arabidopsis *RSF1* Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography, 2485–2498
P. S. Springer: Gene Traps: Tools for Plant Development and Genomics, 1007–1020
J. C. Steffens: Acyltransferases in Protease's Clothing (In This Issue), 1253–1255
A. Steimer, P. Amedeo, K. Afsar, P. Fransz, O. M. Scheid, and J. Paszkowski: Endogenous Targets of Transcriptional Gene Silencing in Arabidopsis, 1165–1178
H.-Y. Steiner, W. Song, L. Zhang, F. Naider, J. M. Becker, and G. Stacey: An Arabidopsis Peptide Transporter Is a Member of a New Class of Membrane Transport Proteins: Correction [**6**, 1289–1299], 2295
T. L. Stokes and E. J. Richards: Mum's the Word: MOM and Modifiers of Transcriptional Gene Silencing (In This Issue), 1003–1006
J. M. Stone, J. E. Heard, T. Asai, and F. M. Ausubel: Simulation of Fungal-Mediated Cell Death by Fumonisin B1 and Selection of Fumonisin B1–Resistant (*fbr*) Arabidopsis Mutants, 1811–1822
Y. Tao, F. Yuan, R. T. Leister, F. M. Ausubel, and F. Katagiri: Mutational Analysis of the Arabidopsis Nucleotide Binding Site–Leucine-Rich Repeat Resistance Gene *RPS2*, 2541–2554
N. G. Taylor, S. Laurie, and S. R. Turner: Multiple Cellulose Synthase Catalytic Subunits Are Required for Cellulose Synthesis in Arabidopsis, 2529–2539
T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu, D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109
R. Vinkenoog, M. Spielman, S. Adams, R. L. Fischer, H. G. Dickinson, and R. J. Scott: Hypomethylation Promotes Autonomous Endosperm Development and Rescues Postfertilization Lethality in *fie* Mutants, 2271–2282
K. Vissenberg, I. M. Martinez-Vilchez, J.-P. Verbelen, J. G. Miller, and S. C. Fry: In Vivo Colocalization of Xyloglucan Endotransglycosylase Activity and Its Donor Substrate in the Elongation Zone of Arabidopsis Roots, 1229–1237
C. Wang, C. A. Zien, M. Afitlhile, R. Welti, D. F. Hildebrand, and X. Wang: Involvement of Phospholipase D in Wound-Induced Accumulation of Jasmonic Acid in Arabidopsis, 2237–2246
R. Wang, K. Guegler, S. T. LaBrie, and N. M. Crawford: Genomic Analysis of a Nutrient Response in Arabidopsis Reveals Diverse Expression Patterns and Novel Metabolic and Potential Regulatory Genes Induced by Nitrate, 1491–1509
A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801
A. Weise, L. Barker, C. Kühn, S. Lalonde, H. Buschmann, W. B. Frommer, and J. M. Ward: A New Subfamily of Sucrose Transporters, SUT4, with Low Affinity/High Capacity Localized in Enucleate Sieve Elements of Plants, 1345–1355
S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582
K. E. Woeste and J. J. Kieber: A Strong Loss-of-Function Mutation in *RAN1* Results in Constitutive Activation of the Ethylene Response Pathway as Well as a Rosette-Lethal Phenotype, 443–455
R. Yadegari, T. Kinoshita, O. Lotan, G. Cohen, A. Katz, Y. Choi, A. Katz, K. Nakashima, J. J. Harada, R. B. Goldberg, R. L. Fischer, and N. Ohad: Mutations in the *FIE* and *MEA* Genes That Encode Interacting Polycomb Proteins Cause Parent-of-Origin Effects on Seed Development by Distinct Mechanisms, 2367–2381
S. Yalovsky, A. Kulukian, M. Rodríguez-Concepción, C. A. Young, and W. Gruissem: Functional Requirement of Plant Farnesyltransferase during Development in Arabidopsis, 1267–1278
S. Yalovsky, M. Rodríguez-Concepción, K. Bracha, G. Toledo-Ortiz, and W. Gruissem: Prenylation of the Floral Transcription Factor APETALA1 Modulates Its Function, 1257–1266
M. Yano, Y. Katayose, M. Ashikari, U. Yamanouchi, L. Monna, T. Fuse, T. Baba, K. Yamamoto, Y. Umehara, Y. Nagamura, and T. Sasaki: *Hd1*, a Major Photoperiod Sensitivity Quantitative Trait Locus in Rice, Is Closely Related to the Arabidopsis Flowering Time Gene *CONSTANS*, 2473–2483
J. Zuo, Q.-W. Niu, N. Nishizawa, Y. Wu, B. Kost, and N.-H. Chua: KORRIGAN, an Arabidopsis Endo-1,4-β-Glucanase, Localizes to the Cell Plate by Polarized Targeting and Is Essential for Cytokinesis, 1137–1152

Arabinogalactan proteins
C. J. Schultz, K. L. Johnson, G. Currie, and A. Bacic: The Classical Arabinogalactan Protein Gene Family of Arabidopsis, 1751–1767

***ARC1* gene**
V. E. Franklin-Tong and F. C. H. Franklin: Self-Incompatibility in Brassica: The Elusive Pollen *S* Gene Is Identified! (Insight), 305–308

Arf1p protein
P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235

ARL proteins
J. McElver, D. Patton, M. Rumbaugh, C.-m. Liu, L. J. Yang, and D. Meinke: The *TITAN5* Gene of Arabidopsis Encodes a Protein Related to the ADP Ribosylation Factor Family of GTP Binding Proteins, 1379–1392

AT hook
G. Morisawa, A. Han-yama, I. Moda, A. Tamai, M. Iwabuchi, and T. Meshi: AHM1, a Novel Type of Nuclear Matrix–Localized, MAR Binding Protein with a Single AT Hook and a J Domain–Homologous Region, 1903–1916

AtERF proteins
S. Y. Fujimoto, M. Ohta, A. Usui, H. Shinshi, and M. Ohme-Takagi: Arabidopsis Ethylene-Responsive Element Binding Factors Act as Transcriptional Activators or Repressors of GCC Box–Mediated Gene Expression, 393–404

AtMSH proteins
K. M. Culligan and J. B. Hays: Arabidopsis MutS Homologs—AtMSH2, AtMSH3, AtMSH6, and a Novel AtMSH7—Form Three Distinct Protein Heterodimers with Different Specificities for Mismatched DNA, 991–1002

ATPases
E. Gomès, M. K. Jakobsen, K. B. Axelsen, M. Geisler, and M. G. Palmgren: Chilling Tolerance in Arabidopsis Involves ALA1, a Member of a New Family of Putative Aminophospholipid Translocases, 2441–2453
C. Thomas, A. Rajagopal, B. Windsor, R. Dudler, A. Lloyd, and S. J. Roux: A Role for Ectophosphatase in Xenobiotic Resistance, 519–533

***AtPTR2* genes**
H.-Y. Steiner, W. Song, L. Zhang, F. Naider, J. M. Becker, and G. Stacey: An Arabidopsis Peptide Transporter Is a Member of a

New Class of Membrane Transport Proteins: Correction [6, 1289–1299], 2295

***AtPUP1* gene**
B. Gillissen, L. Bürkle, B. André, C. Kühn, D. Rentsch, B. Brandl, and W. B. Frommer: A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis, 291–300

***At*Rab1b(N121I)**
H. Batoko, H.-Q. Zheng, C. Hawes, and I. Moore: A Rab1 GTPase Is Required for Transport between the Endoplasmic Reticulum and Golgi Apparatus and for Normal Golgi Movement in Plants, 2201–2217

Auxin
R. M. Harper, E. L. Stowe-Evans, D. R. Luesse, H. Muto, K. Tatematsu, M. K. Watahiki, K. Yamamoto, and E. Liscum: The *NPH4* Locus Encodes the Auxin Response Factor ARF7, a Conditional Regulator of Differential Growth in Aerial Arabidopsis Tissue, 757–770
J. Lasswell, L. E. Rogg, D. C. Nelson, C. Rongey, and B. Bartel: Cloning and Characterization of *IAR1*, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis, 2395–2408
C. Lu and N. Fedoroff: A Mutation in the Arabidopsis *HYL1* Gene Encoding a dsRNA Binding Protein Affects Responses to Abscisic Acid, Auxin, and Cytokinin, 2351–2365
D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518

Avirulence genes
G. T. Bryan, K.-S. Wu, L. Farrall, Y. Jia, H. P. Hershey, S. A. McAdams, K. N. Faulk, G. K. Donaldson, R. Tarchini, and B. Valent: A Single Amino Acid Difference Distinguishes Resistant and Susceptible Alleles of the Rice Blast Resistance Gene *Pi-ta*, 2033–2045
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032

***Avr9* gene**
W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977
T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815

***AVR-Pita* gene**
G. T. Bryan, K.-S. Wu, L. Farrall, Y. Jia, H. P. Hershey, S. A. McAdams, K. N. Faulk, G. K. Donaldson, R. Tarchini, and B. Valent: A Single Amino Acid Difference Distinguishes Resistant and Susceptible Alleles of the Rice Blast Resistance Gene *Pi-ta*, 2033–2045
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032

AvrPto protein
L. Shan, V. K. Thara, G. B. Martin, J.-M. Zhou, and X. Tang: The Pseudomonas AvrPto Protein Is Differentially Recognized by Tomato and Tobacco and Is Localized to the Plant Plasma Membrane, 2323–2337

B

BAMT protein
N. Dudareva, L. M. Murfitt, C. J. Mann, N. Gorenstein, N. Kolosova, C. M. Kish, C. Bonham, and K. Wood: Developmental Regulation of Methyl Benzoate Biosynthesis and Emission in Snapdragon Flowers, 949–961

BANYULS
N. Nesi, I. Debeaujon, C. Jond, G. Pelletier, M. Caboche, and L. Lepiniec: The *TT8* Gene Encodes a Basic Helix-Loop-Helix Domain Protein Required for Expression of *DFR* and *BAN* Genes in Arabidopsis Siliques, 1863–1878

Barley
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646

Basic helix-loop-helix class transcription factor
J. I. Spiegelman, M. N. Mindrinos, C. Fankhauser, D. Richards, J. Lutes, J. Chory, and P. J. Oefner: Cloning of the Arabidopsis *RSF1* Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography, 2485–2498

Basic helix-loop-helix protein
N. Nesi, I. Debeaujon, C. Jond, G. Pelletier, M. Caboche, and L. Lepiniec: The *TT8* Gene Encodes a Basic Helix-Loop-Helix Domain Protein Required for Expression of *DFR* and *BAN* Genes in Arabidopsis Siliques, 1863–1878
M.-S. Soh, Y.-M. Kim, S.-J. Han, and P.-S. Song: REP1, a Basic Helix-Loop-Helix Protein, Is Required for a Branch Pathway of Phytochrome A Signaling in Arabidopsis, 2061–2073
C. Spelt, F. Quattrocchio, J. N. M. Mol, and R. Koes: *anthocyanin1* of Petunia Encodes a Basic Helix-Loop-Helix Protein That Directly Activates Transcription of Structural Anthocyanin Genes, 1619–1631

Basic leucine zipper family
R. R. Finkelstein and T. J. Lynch: The Arabidopsis Abscisic Acid Response Gene *ABI5* Encodes a Basic Leucine Zipper Transcription Factor, 599–609

Bean
M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589

Bean golden mosaic virus
M. R. Morra and I. T. D. Petty: Tissue Specificity of Geminivirus Infection Is Genetically Determined, 2259–2270

Bioprospecting
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393

Biotechnology
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393

Biotrophy
M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589

Blastozone
C. W. Gourlay, J. M. I. Hofer, and T. H. N. Ellis: Pea Compound Leaf Architecture Is Regulated by Interactions among the Genes *UNIFOLIATA*, *COCHLEATA*, *AFILA*, and *TENDRIL-LESS*, 1279–1294

Blue light
T. Imaizumi, T. Kanegae, and M. Wada: Cryptochrome Nucleocytoplasmic Distribution and Gene Expression Are Regulated by Light Quality in the Fern *Adiantum capillus-veneris*, 81–95

BP-80 protein
X. Cao, S. W. Rogers, J. Butler, L. Beevers, and J. C. Rogers: Structural Requirements for Ligand Binding by a Probable Plant Vacuolar Sorting Receptor, 493–506
K. Matsuoka: C-Terminal Propeptides and Vacuolar Sorting by BP-80–Type Proteins: Not All C-Terminal Propeptides Are Equal (Letter To The Editor), 181–182

Brassica
A. L. Casselman, J. Vrebalov, J. A. Conner, A. Singhal, J. Giovannoni, M. E. Nasrallah, and J. B. Nasrallah: Determining the Physical Limits of the Brassica *S* Locus by Recombinational Analysis, 23–33
D. Charlesworth: How Can Two-Gene Models of Self-Incompatibility Generate New Specificities? (Letters To The Editor), 309–310
D. E. Fernandez, G. R. Heck, S. E. Perry, S. E. Patterson, A. B. Bleecker, and S.-C. Fang: The Embryo MADS Domain Factor AGL15 Acts Postembryonically: Inhibition of Perianth Senescence and Abscission via Constitutive Expression, 183–197
V. E. Franklin-Tong and F. C. H. Franklin: Self-Incompatibility in Brassica: The Elusive Pollen *S* Gene Is Identified! (Insight), 305–308
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

Brassinosteroids
C. Yamamuro, Y. Ihara, X. Wu, T. Noguchi, S. Fujioka, S. Takatsuto, M. Ashikari, H. Kitano, and M. Matsuoka: Loss of Function of a Rice *brassinosteroid insensitive1* Homolog Prevents Internode Elongation and Bending of the Lamina Joint, 1591–1605

***BRISTLED1* gene**
J. S. Parker, A. C. Cavell, L. Dolan, K. Roberts, and C. S. Grierson: Genetic Interactions during Root Hair Morphogenesis in Arabidopsis, 1961–1974

C

C function
M. Kotilainen, P. Elomaa, A. Uimari, V. A. Albert, D. Yu, and T. H. Teeri: *GRCD1*, an *AGL2*-like MADS Box Gene, Participates in the C Function during Stamen Development in *Gerbera hybrida*, 1893–1902

Ca^{2+}-ATPase
W. S. Chung, S. H. Lee, J. C. Kim, W. D. Heo, M. C. Kim, C. Y. Park, H. C. Park, C. O. Lim, W. B. Kim, J. F. Harper, and M. J. Cho: Identification of a Calmodulin-Regulated Soybean Ca^{2+}-ATPase (SCA1) That Is Located in the Plasma Membrane, 1393–1407

***CADMIUM SENSITIVE2* gene**
T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu, D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109

Calcium
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
S. G. Cessna, V. E. Sears, M. B. Dickman, and P. S. Low: Oxalic Acid, a Pathogenicity Factor for *Sclerotinia sclerotiorum*, Suppresses the Oxidative Burst of the Host Plant, 2191–2199
I. B. Heath and A. Geitmann: Cell Biology of Plant and Fungal Tip Growth, Getting to the Point (Meeting Report), 1513–1517. Correction, 2295
M. Ishitani, J. Liu, [1]J. Halfter, C.-S. Kim, W. Shi, and J.-K. Zhu: SOS3 Function in Plant Salt Tolerance Requires N-Myristoylation and Calcium Binding, 1667–1677
D. R. Kovar, B. K. Drøbak, and C. J. Staiger: Maize Profilin Isoforms Are Functionally Distinct, 583–598
T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815
J.-U. Sutter, U. Homann, and G. Thiel: Ca^{2+}-Stimulated Exocytosis in Maize Coleoptile Cells, 1127–1136

Calmodulin
W. S. Chung, S. H. Lee, J. C. Kim, W. D. Heo, M. C. Kim, C. Y. Park, H. C. Park, C. O. Lim, W. B. Kim, J. F. Harper, and M. J. Cho: Identification of a Calmodulin-Regulated Soybean Ca^{2+}-ATPase (SCA1) That Is Located in the Plasma Membrane, 1393–1407
J. W. Vos, F. Safadi, A. S. N. Reddy, and P. K. Hepler: The Kinesin-like Calmodulin Binding Protein Is Differentially Involved in Cell Division, 979–990

Calreticulin
V. Gomord and L. Faye: Reply: Glycobiology and the Plant Cell—A World of Information (Letter To The Editor), 1519–1521
S. Pagny, M. Cabanes-Macheteau, J. W. Gillikin, N. Leborgne-Castel, P. Lerouge, R. S. Boston, L. Faye, and V. Gomord: Protein Recycling from the Golgi Apparatus to the Endoplasmic Reticulum in Plants and Its Minor Contribution to Calreticulin Retention, 739–755
P. Pimpl and J. Denecke: ER Retention of Soluble Proteins: Retrieval, Retention, or Both? (Letter To The Editor), 1517–1519

Capsid protein
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925

Cardaminopsis arenosa
L. Comai, A. P. Tyagi, K. Winter, R. Holmes-Davis, S. H. Reynolds, Y. Stevens, and B. Byers: Phenotypic Instability and Rapid Gene Silencing in Newly Formed Arabidopsis Allotetraploids, 1551–1567

Carrot
T. D. Bunney, P. A. C. Watkins, A. F. Beven, P. J. Shaw, L. E. Hernandez, G. P. Lomonossoff, M. Shanks, J. Peart, and B. K. Drøbak: Association of Phosphatidylinositol 3-Kinase with Nuclear Transcription Sites in Higher Plants, 1679–1687
I. Heilmann, J. Stevenson-Paulik, and I. Y. Perera: Plant PtdIns 3-Kinase Goes Nuclear (In This Issue), 1511–1512

Cauliflower
P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235

Cauliflower mosaic virus
M. N. Raizada and V. Walbot: The Late Developmental Pattern of *Mu* Transposon Excision Is Conferred by a Cauliflower Mosaic Virus 35S–Driven MURA cDNA in Transgenic Maize, 5–21

***ccSNF1* gene**
N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247

Cell cycle
P. Binarová, V. Cenklová, B. Hause, E. Kubátová, M. Lysák, J. Doležel, L. Bögre, and P. Dráber: Nuclear γ-Tubulin during Acentriolar Plant Mitosis, 433–442
Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100

Cell cycle regulation
M.-E. Chabouté, B. Clément, M. Sekine, G. Philipps, and N. Chaubet-Gigot: Cell Cycle Regulation of the Tobacco Ribonucleotide Reductase Small Subunit Gene Is Mediated by E2F-like Elements, 1987–1999

Cell death
C.-F. Hwang, A. V. Bhakta, G. M. Truesdell, W. M. Pudlo, and V. M. Williamson: Evidence for a Role of the N Terminus and Leucine-Rich Repeat Region of the *Mi* Gene Product in Regulation of Localized Cell Death, 1319–1329
Z. Mou, Y. He, Y. Dai, X. Liu, and J. Li: Deficiency in Fatty Acid Synthase Leads to Premature Cell Death and Dramatic Alterations in Plant Morphology, 405–417
M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646

Cell division
M. Geisler, J. Nadeau, and F. D. Sack: Oriented Asymmetric Divisions That Generate the Stomatal Spacing Pattern in Arabidopsis Are Disrupted by the *too many mouths* Mutation, 2075–2086
G. Jürgens: Cytokinesis: The Art of Partitioning (In This Issue), 827–829
T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu, D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109
J. W. Vos, F. Safadi, A. S. N. Reddy, and P. K. Hepler: The Kinesin-like Calmodulin Binding Protein Is Differentially Involved in Cell Division, 979–990

Cell elongation
M. Fagard, T. Desnos, T. Desprez, F. Goubet, G. Refregier, G. Mouille, M. McCann, C. Rayon, S. Vernhettes, and H. Höfte: *PROCUSTE1* Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis, 2409–2423
J. Fukazawa, T. Sakai, S. Ishida, I. Yamaguchi, Y. Kamiya, and Y. Takahashi: REPRESSION OF SHOOT GROWTH, a bZIP Transcriptional Activator, Regulates Cell Elongation by Controlling the Level of Gibberellins, 901–915

K. E. Woeste and J. J. Kieber: A Strong Loss-of-Function Mutation in *RAN1* Results in Constitutive Activation of the Ethylene Response Pathway as Well as a Rosette-Lethal Phenotype, 443–455

Cell plates

J. Zuo, Q.-W. Niu, N. Nishizawa, Y. Wu, B. Kost, and N.-H. Chua: KORRIGAN, an Arabidopsis Endo-1,4-β-Glucanase, Localizes to the Cell Plate by Polarized Targeting and Is Essential for Cytokinesis, 1137–1152

Cell wall

M. Otegui and L. A. Staehelin: Syncytial-Type Cell Plates: A Novel Kind of Cell Plate Involved in Endosperm Cellularization of Arabidopsis, 933–947

S. Pagny, M. Cabanes-Macheteau, J. W. Gillikin, N. Leborgne-Castel, P. Lerouge, R. S. Boston, L. Faye, and V. Gomord: Protein Recycling from the Golgi Apparatus to the Endoplasmic Reticulum in Plants and Its Minor Contribution to Calreticulin Retention, 739–755

D. E. Shevell, T. Kunkel, and N.-H. Chua: Cell Wall Alterations in the Arabidopsis *emb30* Mutant, 2047–2059

N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247

Cellulose biosynthesis

N. G. Taylor, S. Laurie, and S. R. Turner: Multiple Cellulose Synthase Catalytic Subunits Are Required for Cellulose Synthesis in Arabidopsis, 2529–2539

Cellulose synthase

R. A. Burton, D. M. Gibeaut, A. Bacic, K. Findlay, K. Roberts, A. Hamilton, D. C. Baulcombe, and G. B. Fincher: Virus-Induced Silencing of a Plant Cellulose Synthase Gene, 691–705

M. Fagard, T. Desnos, T. Desprez, F. Goubet, G. Refregier, G. Mouille, M. McCann, C. Rayon, S. Vernhettes, and H. Höfte: *PROCUSTE1* Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis, 2409–2423

N. G. Taylor, S. Laurie, and S. R. Turner: Multiple Cellulose Synthase Catalytic Subunits Are Required for Cellulose Synthesis in Arabidopsis, 2529–2539

***CENTIPEDE* genes**

J. S. Parker, A. C. Cavell, L. Dolan, K. Roberts, and C. S. Grierson: Genetic Interactions during Root Hair Morphogenesis in Arabidopsis, 1961–1974

***CER6* gene**

A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008

C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798

***cer* mutants**

C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798

Cereals

N. A. Eckardt: Sequencing the Rice Genome (Meeting Report), 2013–2017

***CesA* genes**

R. A. Burton, D. M. Gibeaut, A. Bacic, K. Findlay, K. Roberts, A. Hamilton, D. C. Baulcombe, and G. B. Fincher: Virus-Induced Silencing of a Plant Cellulose Synthase Gene, 691–705

***CEVI-1* gene**

E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128

***Cf-9* gene**

M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201

W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977

T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815

***CgMEK1* gene**

Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343

Chalcone synthase

L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione *S*-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950

Channels

B. Lacombe, G. Pilot, E. Michard, F. Gaymard, H. Sentenac, and J.-B. Thibaud: A Shaker-like K^+ Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis, 837–851

Chlamydomonas reinhardtii

A. B. Cahoon and M. P. Timko: *yellow-in-the-dark* Mutants of Chlamydomonas Lack the CHLL Subunit of Light-Independent Protochlorophyllide Reductase, 559–568

W. Majeran, F.-A. Wollman, and O. Vallon: Evidence for a Role of ClpP in the Degradation of the Chloroplast Cytochrome b_6f Complex, 137–149

J. Rexach, E. Fernández, and A. Galván: The *Chlamydomonas reinhardtii Nar1* Gene Encodes a Chloroplast Membrane Protein Involved in Nitrite Transport, 1441–1453

CHLL protein

A. B. Cahoon and M. P. Timko: *yellow-in-the-dark* Mutants of Chlamydomonas Lack the CHLL Subunit of Light-Independent Protochlorophyllide Reductase, 559–568

Chlorate-resistant mutant

D. Cao, Y. Lin, and C.-L. Cheng: Genetic Interactions between the Chlorate-Resistant Mutant *cr88* and the Photomorphogenic Mutants *cop1* and *hy5*, 199–210

Chloroplast differentiation

Y. Wang, G. Duby, B. Purnelle, and M. Boutry: Tobacco *VDL* Gene Encodes a Plastid DEAD Box RNA Helicase and Is Involved in Chloroplast Differentiation and Plant Morphogenesis, 2129–2142

Chloroplasts

G. Creissen, J. Fermin, M. Fryer, B. Kular, N. Leyland, H. Reynolds, G. Pastori, F. Wellburn, N. Baker, A. Wellburn, and P. Mulineau: Elevated Glutatione Biosynthetic Capacity in the Chloroplasts of Transgenic Tobacco Paradoxically Causes Increased Oxidative Stress: Correction [**11,** 1277–1291], 301

T. May and J. Soll: 14-3-3 Proteins Form a Guidance Complex with Chloroplast Precursor Proteins in Plants, 53–63

J.-B. Peltier, G. Friso, D. E. Kalume, P. Roepstorff, F. Nilsson, I. Adamska, and K. J. van Wijk: Proteomics of the Chloroplast: Systematic Identification and Targeting Analysis of Lumenal and Peripheral Thylakoid Proteins, 319–341

J. Rexach, E. Fernández, and A. Galván: The *Chlamydomonas reinhardtii Nar1* Gene Encodes a Chloroplast Membrane Protein Involved in Nitrite Transport, 1441–1453

S. Seo, M. Okamoto, T. Iwai, M. Iwano, K. Fukui, A. Isogai, N. Nakajima, and Y. Ohashi: Reduced Levels of Chloroplast FtsH Protein in Tobacco Mosaic Virus–Infected Tobacco Leaves Accelerate the Hypersensitive Reaction, 917–932

H. B. Smith: Proteomics: Broad Strokes of Expressionism? (In This Issue), 303–304

S.-L. Tu and H.-m. Li: Insertion of OEP14 into the Outer Envelope Membrane Is Mediated by Proteinaceous Components of Chloroplasts, 1951–1959

Cholesterol

A. C. Diener, H. Li, W.-x. Zhou, W. J. Whoriskey, W. D. Nes, and G. R. Fink: *STEROL METHYLTRANSFERASE 1* Controls the Level of Cholesterol in Plants, 853–870

Circadian clock

P. F. Devlin and S. A. Kay: Cryptochromes Are Required for Phytochrome Signaling to the Circadian Clock but Not for Rhythmicity, 2499–2509

ClpP protease

W. Majeran, F.-A. Wollman, and O. Vallon: Evidence for a Role of ClpP in the Degradation of the Chloroplast Cytochrome b_6f Complex, 137–149

***CLTA1* gene**

M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between

Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589

Cnx1 protein
G. Schwarz, J. Schulze, F. Bittner, T. Eilers, J. Kuper, G. Bollmann, A. Nerlich, H. Brinkmann, and R. R. Mendel: The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton, 2455–2471

Coat protein–coated vesicles
N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011
P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235

Cochliobolus carbonum
N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247

Cold tolerance
E. Gomès, M. K. Jakobsen, K. B. Axelsen, M. Geisler, and M. G. Palmgren: Chilling Tolerance in Arabidopsis Involves ALA1, a Member of a New Family of Putative Aminophospholipid Translocases, 2441–2453

Colinearity
J. L. Bennetzen: Comparative Sequence Analysis of Plant Nuclear Genomes: Microcolinearity and Its Many Exceptions, 1021–1029

Colletotrichum gloeosporioides
Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343

Colletotrichum lindemuthianum
M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589

Comparative genomics
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

Comparative mapping
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646
J. S. Heslop-Harrison: Comparative Genome Organization in Plants: From Sequence and Markers to Chromatin and Chromosomes, 617–635

Comparative sequence analysis
J. L. Bennetzen: Comparative Sequence Analysis of Plant Nuclear Genomes: Microcolinearity and Its Many Exceptions, 1021–1029

Compound leaf architecture
C. W. Gourlay, J. M. I. Hofer, and T. H. N. Ellis: Pea Compound Leaf Architecture Is Regulated by Interactions among the Genes *UNIFOLIATA*, *COCHLEATA*, *AFILA*, and *TENDRILLESS*, 1279–1294

CONSTANS
N. A. Eckardt: Giving Rice the Time of Day: Molecular Identification of a Major Photoperiod Sensitivity Quantitative Trait Locus (In This Issue), 2299–2301
H. Onouchi, M. I. Igeño, C. Périlleux, K. Graves, and G. Coupland: Mutagenesis of Plants Overexpressing *CONSTANS* Demonstrates Novel Interactions among Arabidopsis Flowering-Time Genes, 885–900
M. Yano, Y. Katayose, M. Ashikari, U. Yamanouchi, L. Monna, T. Fuse, T. Baba, K. Yamamoto, Y. Umehara, Y. Nagamura, and T. Sasaki: *Hd1*, a Major Photoperiod Sensitivity Quantitative Trait Locus in Rice, Is Closely Related to the Arabidopsis Flowering Time Gene *CONSTANS*, 2473–2483

CONSTITUTIVE PHOTOMORPHOGENIC1
D. Cao, Y. Lin, and C.-L. Cheng: Genetic Interactions between the Chlorate-Resistant Mutant *cr88* and the Photomorphogenic Mutants *cop1* and *hy5*, 199–210

CONSTITUTIVELY PHOTOMORPHOGENIC1
J. A. Sullivan and J. C. Gray: The Pea *light-independent photomorphogenesis1* Mutant Results from Partial Duplication of the *COP1* Generating an Internal Promoter and Producing Two Distinct Transcripts, 1927–1937

Copper
K. E. Woeste and J. J. Kieber: A Strong Loss-of-Function Mutation in *RAN1* Results in Constitutive Activation of the Ethylene Response Pathway as Well as a Rosette-Lethal Phenotype, 443–455

Cotton
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

Cotyledons
Z. Havelda and A. J. Maule: Complex Spatial Responses to Cucumber Mosaic Virus Infection in Susceptible *Cucurbita pepo* Cotyledons, 1975–1985

***cpr* mutants**
J. D. Clarke, S. M. Volko, H. Ledford, F. M. Ausubel, and X. Dong: Roles of Salicylic Acid, Jasmonic Acid, and Ethylene in *cpr*-Induced Resistance in Arabidopsis, 2175–2190

Craterostigma plantagineum
W. Frank, T. Munnik, K. Kerkmann, F. Salamini, and D. Bartels: Water Deficit Triggers Phospholipase D Activity in the Resurrection Plant *Craterostigma plantagineum*, 111–123

Cryptochromes
P. F. Devlin and S. A. Kay: Cryptochromes Are Required for Phytochrome Signaling to the Circadian Clock but Not for Rhythmicity, 2499–2509
T. Imaizumi, T. Kanegae, and M. Wada: Cryptochrome Nucleocytoplasmic Distribution and Gene Expression Are Regulated by Light Quality in the Fern *Adiantum capillus-veneris*, 81–95
H. B. Smith: Photoreceptors in Signal Transduction: Pathways of Enlightenment (In This Issue), 1–3

C-terminal activation domains
P. Döring, E. Treuter, C. Kistner, R. Lyck, A. Chen, and L. Nover: The Role of AHA Motifs in the Activator Function of Tomato Heat Stress Transcription Factors HsfA1 and HsfA2, 265–278

C-terminal propeptides
K. Matsuoka: C-Terminal Propeptides and Vacuolar Sorting by BP-80–Type Proteins: Not All C-Terminal Propeptides Are Equal (Letter To The Editor), 181–182

Cucumber mosaic virus
Z. Havelda and A. J. Maule: Complex Spatial Responses to Cucumber Mosaic Virus Infection in Susceptible *Cucurbita pepo* Cotyledons, 1975–1985
P. Xu and M. J. Roossinck: Cucumber Mosaic Virus D Satellite RNA–Induced Programmed Cell Death in Tomato, 1079–1092

Cucurbita pepo
Z. Havelda and A. J. Maule: Complex Spatial Responses to Cucumber Mosaic Virus Infection in Susceptible *Cucurbita pepo* Cotyledons, 1975–1985

***CUT1* gene**
A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008
C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798

Cuticle
P. Sieber, M. Schorderet, U. Ryser, A. Buchala, P. Kolattukudy, J. P. Métraux, and C. Nawrath: Transgenic Arabidopsis Plants Expressing a Fungal Cutinase Show Alterations in the Structure and Properties of the Cuticle and Postgenital Organ Fusions, 721–737

Cutin
P. Sieber, M. Schorderet, U. Ryser, A. Buchala, P. Kolattukudy, J. P. Métraux, and C. Nawrath: Transgenic Arabidopsis Plants Expressing a Fungal Cutinase Show Alterations in the Structure and Properties of the Cuticle and Postgenital Organ Fusions, 721–737

Cyclobutane pyrimidine dimers
J. Hidema, T. Kumagai, and B. M. Sutherland: UV Radiation–Sensitive Norin 1 Rice Contains Defective Cyclobutane Pyrimidine Dimer Photolyase, 1569–1578

Cyclophilin 5 protein
M. Grebe, J. Gadea, T. Steinmann, M. Kientz, J.-U. Rahfeld, K. Salchert, C. Koncz, and G. Jürgens: A Conserved Domain of the Arabidopsis GNOM Protein Mediates Subunit Interaction and Cyclophilin 5 Binding, 343–356
Cysteine proteinase
T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040
Cytochrome b_6f
W. Majeran, F.-A. Wollman, and O. Vallon: Evidence for a Role of ClpP in the Degradation of the Chloroplast Cytochrome b_6f Complex, 137–149
Cytochrome P450 gene
T. Ito and E. M. Meyerowitz: Overexpression of a Gene Encoding a Cytochrome P450, *CYP78A9*, Induces Large and Seedless Fruit in Arabidopsis, 1541–1550
Cytokinesis
Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343
J. W. Vos, F. Safadi, A. S. N. Reddy, and P. K. Hepler: The Kinesin-like Calmodulin Binding Protein Is Differentially Involved in Cell Division, 979–990
J. Zuo, Q.-W. Niu, N. Nishizawa, Y. Wu, B. Kost, and N.-H. Chua: KORRIGAN, an Arabidopsis Endo-1,4-β-Glucanase, Localizes to the Cell Plate by Polarized Targeting and Is Essential for Cytokinesis, 1137–1152
Cytokinin
C. Lu and N. Fedoroff: A Mutation in the Arabidopsis *HYL1* Gene Encoding a dsRNA Binding Protein Affects Responses to Abscisic Acid, Auxin, and Cytokinin, 2351–2365
Cytoplasmic streaming
D. A. Collings, C. N. Carter, J. C. Rink, A. C. Scott, S. E. Wyatt, and N. S. Allen: Plant Nuclei Can Contain Extensive Grooves and Invaginations, 2425–2439
Cytoskeleton
A. Geitmann, B. N. Snowman, A. M. C. Emons, and V. E. Franklin-Tong: Alterations in the Actin Cytoskeleton of Pollen Tubes Are Induced by the Self-Incompatibility Reaction in *Papaver rhoeas*, 1239–1251
G. Schwarz, J. Schulze, F. Bittner, T. Eilers, J. Kuper, G. Bollmann, A. Nerlich, H. Brinkmann, and R. R. Mendel: The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton, 2455–2471

D

D1 protein
M. Lindahl, C. Spetea, T. Hundal, A. B. Oppenheim, Z. Adam, and B. Andersson: The Thylakoid FtsH Protease Plays a Role in the Light-Induced Turnover of the Photosystem II D1 Protein, 419–431
L. Zhang, V. Paakkarinen, K. J. van Wijk, and E.-M. Aro: Biogenesis of the Chloroplast-Encoded D1 Protein: Regulation of Translation Elongation, Insertion, and Assembly into Photosystem II, 1769–1781
D satellite RNA
P. Xu and M. J. Roossinck: Cucumber Mosaic Virus D Satellite RNA–Induced Programmed Cell Death in Tomato, 1079–1092
***ddm1* gene**
H. Hirochika, H. Okamoto, and T. Kakutani: Silencing of Retrotransposons in Arabidopsis and Reactivation by the *ddm1* Mutation, 357–368
DEAD box RNA helicase
Y. Wang, G. Duby, B. Purnelle, and M. Boutry: Tobacco *VDL* Gene Encodes a Plastid DEAD Box RNA Helicase and Is Involved in Chloroplast Differentiation and Plant Morphogenesis, 2129–2142
***deetiolated* mutant**
A. Rohde, R. De Rycke, T. Beeckman, G. Engler, M. Van Montagu, and W. Boerjan: ABI3 Affects Plastid Differentiation in Dark-Grown Arabidopsis Seedlings, 35–52
Defense genes
K. Sugimoto, S. Takeda, and H. Hirochika: MYB-Related Transcription Factor NtMYB2 Induced by Wounding and Elicitors is a Regulator of the Tobacco Retrotransposon *Tto1* and Defense-Related Genes, 2511–2527
Defense response
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423
Dehiscence
P. M. Sanders, P. Y. Lee, C. Biesgen, J. D. Boone, T. P. Beals, E. W. Weiler, and R. B. Goldberg: The Arabidopsis *DELAYED DEHISCENCE1* Gene Encodes an Enzyme in the Jasmonic Acid Synthesis Pathway, 1041–1061
Dehydration
W. Frank, T. Munnik, K. Kerkmann, F. Salamini, and D. Bartels: Water Deficit Triggers Phospholipase D Activity in the Resurrection Plant *Craterostigma plantagineum*, 111–123
Denaturing high-performance liquid chromatography
J. I. Spiegelman, M. N. Mindrinos, C. Fankhauser, D. Richards, J. Lutes, J. Chory, and P. J. Oefner: Cloning of the Arabidopsis *RSF1* Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography, 2485–2498
Dendrobium
H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159
***detachment9* mutant**
E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128
DIHYDROFLAVONOL 4-REDUCTASE
N. Nesi, I. Debeaujon, C. Jond, G. Pelletier, M. Caboche, and L. Lepiniec: The *TT8* Gene Encodes a Basic Helix-Loop-Helix Domain Protein Required for Expression of *DFR* and *BAN* Genes in Arabidopsis Siliques, 1863–1878
Dimerization
L. Essers, R. H. Adolphs, and R. Kunze: A Highly Conserved Domain of the Maize *Activator* Transposase Is Involved in Dimerization, 211–223
M. Grebe, J. Gadea, T. Steinmann, M. Kientz, J.-U. Rahfeld, K. Salchert, C. Koncz, and G. Jürgens: A Conserved Domain of the Arabidopsis GNOM Protein Mediates Subunit Interaction and Cyclophilin 5 Binding, 343–356
Disease resistance
M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290

D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589

W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977

X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-O-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702

J. E. Luck, G. J. Lawrence, P. N. Dodds, K. W. Shepherd, and J. G. Ellis: Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination, 1367–1377

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343

T. Meindl, T. Boller, and G. Felix: The Bacterial Elicitor Flagellin Activates Its Receptor in Tomato Cells According to the Address–Message Concept, 1783–1794

T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040

T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925

P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719

T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815

J. M. Stone, J. E. Heard, T. Asai, and F. M. Ausubel: Simulation of Fungal-Mediated Cell Death by Fumonisin B1 and Selection of Fumonisin B1–Resistant (*fbr*) Arabidopsis Mutants, 1811–1822

R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391

N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247

W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423

S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582

T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826

DNA methylation

J. E. Dorweiler, C. C. Carey, K. M. Kubo, J. B. Hollick, J. L. Kermicle, and V. L. Chandler: *mediator of paramutation1* Is Required for Establishment and Maintenance of Paramutation at Multiple Maize Loci, 2101–2118

DNA repair

J. Hidema, T. Kumagai, and B. M. Sutherland: UV Radiation–Sensitive Norin 1 Rice Contains Defective Cyclobutane Pyrimidine Dimer Photolyase, 1569–1578

DNA replication

Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100

***DOH1* gene**

H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159

***DOMADS1* gene**

H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159

Double-stranded RNA binding protein

C. Lu and N. Fedoroff: A Mutation in the Arabidopsis *HYL1* Gene Encoding a dsRNA Binding Protein Affects Responses to Abscisic Acid, Auxin, and Cytokinin, 2351–2365

DS9 protein

S. Seo, M. Okamoto, T. Iwai, M. Iwano, K. Fukui, A. Isogai, N. Nakajima, and Y. Ohashi: Reduced Levels of Chloroplast FtsH Protein in Tobacco Mosaic Virus–Infected Tobacco Leaves Accelerate the Hypersensitive Reaction, 917–932

Dual specificity

D. P. Matton, D. T. Luu, D. Morse, and M. Cappadocia: Reply: Establishing a Paradigm for the Generation of New *S* Alleles (Letters To The Editor), 313–315

M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312

Duplications

G. Blanc, A. Barakat, R. Guyot, R. Cooke, and M. Delseny: Extensive Duplication and Reshuffling in the Arabidopsis Genome, 1093–1101

E

Ectophosphatase

C. Thomas, A. Rajagopal, B. Windsor, R. Dudler, A. Lloyd, and S. J. Roux: A Role for Ectophosphatase in Xenobiotic Resistance, 519–533

E2F elements

M.-E. Chabouté, B. Clément, M. Sekine, G. Philipps, and N. Chaubet-Gigot: Cell Cycle Regulation of the Tobacco Ribonucleotide Reductase Small Subunit Gene Is Mediated by E2F-like Elements, 1987–1999

***eid1* mutant**

C. Büche, C. Poppe, E. Schäfer, and T. Kretsch: *eid1*: A New Arabidopsis Mutant Hypersensitive in Phytochrome A–Dependent High-Irradiance Responses, 547–558

Elicitor response element

D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

Elicitor signals

T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826

***emb30* mutants**

D. E. Shevell, T. Kunkel, and N.-H. Chua: Cell Wall Alterations in the Arabidopsis *emb30* Mutant, 2047–2059

Embryogenesis

A. C. Diener, H. Li, W.-x. Zhou, W. J. Whoriskey, W. D. Nes, and G. R. Fink: *STEROL METHYLTRANSFERASE 1* Controls the Level of Cholesterol in Plants, 853–870

M. Grebe, J. Gadea, T. Steinmann, M. Kientz, J.-U. Rahfeld, K. Salchert, C. Koncz, and G. Jürgens: A Conserved Domain of the Arabidopsis GNOM Protein Mediates Subunit Interaction and Cyclophilin 5 Binding, 343–356

E. Russinova and S. de Vries: Parental Contribution to Plant Embryos (Insight), 461–463

Endo-1,4-β-glucanase

J. Zuo, Q.-W. Niu, N. Nishizawa, Y. Wu, B. Kost, and N.-H. Chua: KORRIGAN, an Arabidopsis Endo-1,4-β-Glucanase, Local-

izes to the Cell Plate by Polarized Targeting and Is Essential for Cytokinesis, 1137–1152

Endoplasmic reticulum

H. Batoko, H.-Q. Zheng, C. Hawes, and I. Moore: A Rab1 GTPase Is Required for Transport between the Endoplasmic Reticulum and Golgi Apparatus and for Normal Golgi Movement in Plants, 2201–2217

M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201

D. A. Collings, C. N. Carter, J. C. Rink, A. C. Scott, S. E. Wyatt, and N. S. Allen: Plant Nuclei Can Contain Extensive Grooves and Invaginations, 2425–2439

N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011

V. Gomord and L. Faye: Reply: Glycobiology and the Plant Cell—A World of Information (Letter To The Editor), 1519–1521

S. Pagny, M. Cabanes-Macheteau, J. W. Gillikin, N. Leborgne-Castel, P. Lerouge, R. S. Boston, L. Faye, and V. Gomord: Protein Recycling from the Golgi Apparatus to the Endoplasmic Reticulum in Plants and Its Minor Contribution to Calreticulin Retention, 739–755

P. Pimpl and J. Denecke: ER Retention of Soluble Proteins: Retrieval, Retention, or Both? (Letter To The Editor), 1517–1519

P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235

Endosperm

G. Jürgens: Cytokinesis: The Art of Partitioning (In This Issue), 827–829

M. Otegui and L. A. Staehelin: Syncytial-Type Cell Plates: A Novel Kind of Cell Plate Involved in Endosperm Cellularization of Arabidopsis, 933–947

Endosperm development

R. Vinkenoog, M. Spielman, S. Adams, R. L. Fischer, H. G. Dickinson, and R. J. Scott: Hypomethylation Promotes Autonomous Endosperm Development and Rescues Postfertilization Lethality in *fie* Mutants, 2271–2282

enhanced response to abscisic acid1

S. Yalovsky, A. Kulukian, M. Rodríguez-Concepción, C. A. Young, and W. Gruissem: Functional Requirement of Plant Farnesyltransferase during Development in Arabidopsis, 1267–1278

Enoyl-acyl carrier protein reductase

Z. Mou, Y. He, Y. Dai, X. Liu, and J. Li: Deficiency in Fatty Acid Synthase Leads to Premature Cell Death and Dramatic Alterations in Plant Morphology, 405–417

Epigenetics

T. L. Stokes and E. J. Richards: Mum's the Word: MOM and Modifiers of Transcriptional Gene Silencing (In This Issue), 1003–1006

***era1* mutant**

S. Yalovsky, A. Kulukian, M. Rodríguez-Concepción, C. A. Young, and W. Gruissem: Functional Requirement of Plant Farnesyltransferase during Development in Arabidopsis, 1267–1278

Estrogen receptor

W. Bruce, O. Folkerts, C. Garnaat, O. Crasta, B. Roth, and B. Bowen: Expression Profiling of the Maize Flavonoid Pathway Genes Controlled by Estradiol-Inducible Transcription Factors CRC and P, 65–79

Ethylene

T. Asai, J. M. Stone, J. E. Heard, Y. Kovtun, P. Yorgey, J. Sheen, and F. M. Ausubel: Fumonisin B1–Induced Cell Death in Arabidopsis Protoplasts Required Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways, 1823–1835

N. Beaudoin, C. Serizet, F. Gosti, and J. Giraudat: Interactions between Abscisic Acid and Ethylene Signaling Cascades, 1103–1115

J. D. Clarke, S. M. Volko, H. Ledford, F. M. Ausubel, and X. Dong: Roles of Salicylic Acid, Jasmonic Acid, and Ethylene in *cpr*-Induced Resistance in Arabidopsis, 2175–2190

M. Ghassemian, E. Nambara, S. Cutler, H. Kawaide, Y. Kamiya, and P. McCourt: Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in Arabidopsis, 1117–1126

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

R. M. Harper, E. L. Stowe-Evans, D. R. Luesse, H. Muto, K. Tatematsu, M. K. Watahiki, K. Yamamoto, and E. Liscum: The *NPH4* Locus Encodes the Auxin Response Factor ARF7, a Conditional Regulator of Differential Growth in Aerial Arabidopsis Tissue, 757–770

K. Overmyer, H. Tuominen, R. Kettunen, C. Betz, C. Langebartels, H. Sandermann, Jr., and J. Kangasjärvi: Ozone-Sensitive Arabidopsis *rcd1* Mutant Reveals Opposite Roles for Ethylene and Jasmonate Signaling Pathways in Regulating Superoxide-Dependent Cell Death, 1849–1862

K. E. Woeste and J. J. Kieber: A Strong Loss-of-Function Mutation in *RAN1* Results in Constitutive Activation of the Ethylene Response Pathway as Well as a Rosette-Lethal Phenotype, 443–455

Euchromatin

Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100

Evolution

J. L. Bennetzen: Comparative Sequence Analysis of Plant Nuclear Genomes: Microcolinearity and Its Many Exceptions, 1021–1029

G. Blanc, A. Barakat, R. Guyot, R. Cooke, and M. Delseny: Extensive Duplication and Reshuffling in the Arabidopsis Genome, 1093–1101

D. Charlesworth: How Can Two-Gene Models of Self-Incompatibility Generate New Specificities? (Letters To The Editor), 309–310

T. Ito and E. M. Meyerowitz: Overexpression of a Gene Encoding a Cytochrome P450, *CYP78A9*, Induces Large and Seedless Fruit in Arabidopsis, 1541–1550

D. P. Matton, D. T. Luu, D. Morse, and M. Cappadocia: Reply: Establishing a Paradigm for the Generation of New *S* Alleles (Letters To The Editor), 313–315

A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391

M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312

Exocytosis

J.-U. Sutter, U. Homann, and G. Thiel: Ca^{2+}-Stimulated Exocytosis in Maize Coleoptile Cells, 1127–1136

Expansin

R. C. O'Malley and D. G. Lynn: Expansin Message Regulation in Parasitic Angiosperms: Marking Time in Development, 1455–1465

F

Fall armyworm

T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040

Farnesyltransferase

S. Yalovsky, A. Kulukian, M. Rodríguez-Concepción, C. A. Young, and W. Gruissem: Functional Requirement of Plant Farnesyltransferase during Development in Arabidopsis, 1267–1278

S. Yalovsky, M. Rodríguez-Concepción, K. Bracha, G. Toledo-Ortiz, and W. Gruissem: Prenylation of the Floral Transcription Factor APETALA1 Modulates Its Function, 1257–1266

Fatty acid biosynthesis

Z. Mou, Y. He, Y. Dai, X. Liu, and J. Li: Deficiency in Fatty Acid Synthase Leads to Premature Cell Death and Dramatic Alterations in Plant Morphology, 405–417

***fcy2* mutant**

B. Gillissen, L. Bürkle, B. André, C. Kühn, D. Rentsch, B. Brandl, and W. B. Frommer: A New Family of High-Affinity Transporters

for Adenine, Cytosine, and Purine Derivatives in Arabidopsis, 291–300

Ferredoxin

J. Ling, D. R. Wells, R. L. Tanguay, L. F. Dickey, W. F. Thompson, and D. R. Gallie: Heat Shock Protein HSP101 Binds to the *Fed-1* Internal Light Regulatory Element and Mediates Its High Translational Activity, 1213–1227

***FERTILIZATION-INDEPENDENT ENDOSPERM* gene**

R. Yadegari, T. Kinoshita, O. Lotan, G. Cohen, A. Katz, Y. Choi, A. Katz, K. Nakashima, J. J. Harada, R. B. Goldberg, R. L. Fischer, and N. Ohad: Mutations in the *FIE* and *MEA* Genes That Encode Interacting Polycomb Proteins Cause Parent-of-Origin Effects on Seed Development by Distinct Mechanisms, 2367–2381

Fibers

O. J. Ratcliffe, J. L. Riechmann, and J. Z. Zhang: *INTERFASCICULAR FIBERLESS1* Is the Same Gene as *REVOLUTA* (Letters To The Editor), 315–317

***fie-1* mutant**

R. Vinkenoog, M. Spielman, S. Adams, R. L. Fischer, H. G. Dickinson, and R. J. Scott: Hypomethylation Promotes Autonomous Endosperm Development and Rescues Postfertilization Lethality in *fie* Mutants, 2271–2282

Flagellin

T. Meindl, T. Boller, and G. Felix: The Bacterial Elicitor Flagellin Activates Its Receptor in Tomato Cells According to the Address–Message Concept, 1783–1794

Flavonoid biosynthesis

W. Bruce, O. Folkerts, C. Garnaat, O. Crasta, B. Roth, and B. Bowen: Expression Profiling of the Maize Flavonoid Pathway Genes Controlled by Estradiol-Inducible Transcription Factors CRC and P, 65–79

N. Nesi, I. Debeaujon, C. Jond, G. Pelletier, M. Caboche, and L. Lepiniec: The *TT8* Gene Encodes a Basic Helix-Loop-Helix Domain Protein Required for Expression of *DFR* and *BAN* Genes in Arabidopsis Siliques, 1863–1878

Flavor biogenesis

A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661

Flax

J. E. Luck, G. J. Lawrence, P. N. Dodds, K. W. Shepherd, and J. G. Ellis: Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination, 1367–1377

Floral development

S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309

M. K. Deyholos and L. E. Sieburth: Separable Whorl-Specific Expression and Negative Regulation by Enhancer Elements within the *AGAMOUS* Second Intron, 1799–1810

N. Dudareva, L. M. Murfitt, C. J. Mann, N. Gorenstein, N. Kolosova, C. M. Kish, C. Bonham, and K. Wood: Developmental Regulation of Methyl Benzoate Biosynthesis and Emission in Snapdragon Flowers, 949–961

J.-S. Jeon, S. Jang, S. Lee, J. Nam, C. Kim, S.-H. Lee, Y.-Y. Chung, S.-R. Kim, Y. H. Lee, Y.-G. Cho, and G. An: *leafy hull sterile1* Is a Homeotic Mutation in a Rice MADS Box Gene Affecting Rice Flower Development, 871–884

M. Kotilainen, P. Elomaa, A. Uimari, V. A. Albert, D. Yu, and T. H. Teeri: *GRCD1*, an *AGL2*-like MADS Box Gene, Participates in the C Function during Stamen Development in *Gerbera hybrida*, 1893–1902

B. A. Krizek, V. Prost, and A. Macias: *AINTEGUMENTA* Promotes Petal Identity and Acts as a Negative Regulator of *AGAMOUS*, 1357–1366

H. Onouchi, M. I. Igeño, C. Périlleux, K. Graves, and G. Coupland: Mutagenesis of Plants Overexpressing *CONSTANS* Demonstrates Novel Interactions among Arabidopsis Flowering-Time Genes, 885–900

H. Sakai, B. A. Krizek, S. E. Jacobsen, and E. M. Meyerowitz: Regulation of *SUP* Expression Identifies Multiple Regulators Involved in Arabidopsis Floral Meristem Development, 1607–1618

P. M. Sanders, P. Y. Lee, C. Biesgen, J. D. Boone, T. P. Beals, E. W. Weiler, and R. B. Goldberg: The Arabidopsis *DELAYED DEHISCENCE1* Gene Encodes an Enzyme in the Jasmonic Acid Synthesis Pathway, 1041–1061

F. Tooke and N. H. Battey: A Leaf-Derived Signal Is a Quantitative Determinant of Floral Form in Impatiens, 1837–1847

S. Yalovsky, A. Kulukian, M. Rodríguez-Concepción, C. A. Young, and W. Gruissem: Functional Requirement of Plant Farnesyltransferase during Development in Arabidopsis, 1267–1278

S. Yalovsky, M. Rodríguez-Concepción, K. Bracha, G. Toledo-Ortiz, and W. Gruissem: Prenylation of the Floral Transcription Factor APETALA1 Modulates Its Function, 1257–1266

Floral homeotic genes

H. Sakai, B. A. Krizek, S. E. Jacobsen, and E. M. Meyerowitz: Regulation of *SUP* Expression Identifies Multiple Regulators Involved in Arabidopsis Floral Meristem Development, 1607–1618

Floral scent

N. Dudareva, L. M. Murfitt, C. J. Mann, N. Gorenstein, N. Kolosova, C. M. Kish, C. Bonham, and K. Wood: Developmental Regulation of Methyl Benzoate Biosynthesis and Emission in Snapdragon Flowers, 949–961

Floral transition

H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159

Flowering-time genes

H. Onouchi, M. I. Igeño, C. Périlleux, K. Graves, and G. Coupland: Mutagenesis of Plants Overexpressing *CONSTANS* Demonstrates Novel Interactions among Arabidopsis Flowering-Time Genes, 885–900

Fruit development

A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661

T. Ito and E. M. Meyerowitz: Overexpression of a Gene Encoding a Cytochrome P450, *CYP78A9*, Induces Large and Seedless Fruit in Arabidopsis, 1541–1550

FtsH protease

M. Lindahl, C. Spetea, T. Hundal, A. B. Oppenheim, Z. Adam, and B. Andersson: The Thylakoid FtsH Protease Plays a Role in the Light-Induced Turnover of the Photosystem II D1 Protein, 419–431

FtsH protein

S. Seo, M. Okamoto, T. Iwai, M. Iwano, K. Fukui, A. Isogai, N. Nakajima, and Y. Ohashi: Reduced Levels of Chloroplast FtsH Protein in Tobacco Mosaic Virus–Infected Tobacco Leaves Accelerate the Hypersensitive Reaction, 917–932

Fumonisin B1

T. Asai, J. M. Stone, J. E. Heard, Y. Kovtun, P. Yorgey, J. Sheen, and F. M. Ausubel: Fumonisin B1–Induced Cell Death in Arabidopsis Protoplasts Requires Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways, 1823–1835

J. M. Stone, J. E. Heard, T. Asai, and F. M. Ausubel: Simulation of Fungal-Mediated Cell Death by Fumonisin B1 and Selection of Fumonisin B1–Resistant (*fbr*) Arabidopsis Mutants, 1811–1822

Fungal contaminant

H.-Y. Steiner, W. Song, L. Zhang, F. Naider, J. M. Becker, and G. Stacey: An Arabidopsis Peptide Transporter Is a Member of a New Class of Membrane Transport Proteins: Correction [**6**, 1289–1299], 2295

Fusarium moniliforme

J. M. Stone, J. E. Heard, T. Asai, and F. M. Ausubel: Simulation of Fungal-Mediated Cell Death by Fumonisin B1 and Selection of Fumonisin B1–Resistant (*fbr*) Arabidopsis Mutants, 1811–1822

Fusarium solani* f sp *pisi

P. Sieber, M. Schorderet, U. Ryser, A. Buchala, P. Kolattukudy, J.-P. Métraux, and C. Nawrath: Transgenic Arabidopsis Plants Expressing a Fungal Cutinase Show Alterations in the

Structure and Properties of the Cuticle and Postgenital Organ Fusions, 721–737

G

***GAGA* genes**
M. Kotilainen, P. Elomaa, A. Uimari, V. A. Albert, D. Yu, and T. H. Teeri: *GRCD1*, an *AGL2*-like MADS Box Gene, Participates in the C Function during Stamen Development in *Gerbera hybrida*, 1893–1902

GCC box
S. Y. Fujimoto, M. Ohta, A. Usui, H. Shinshi, and M. Ohme-Takagi: Arabidopsis Ethylene-Responsive Element Binding Factors Act as Transcriptional Activators or Repressors of GCC Box–Mediated Gene Expression, 393–404

Gene duplication
J. A. Sullivan and J. C. Gray: The Pea *light-independent photomorphogenesis1* Mutant Results from Partial Duplication of the *COP1* Generating an Internal Promoter and Producing Two Distinct Transcripts, 1927–1937
P. Zhang, S. Chopra, and T. Peterson: A Segmental Gene Duplication Generated Differentially Expressed *myb*-Homologous Genes in Maize, 2311–2322

Gene silencing
R. A. Burton, D. M. Gibeaut, A. Bacic, K. Findlay, K. Roberts, A. Hamilton, D. C. Baulcombe, and G. B. Fincher: Virus-Induced Silencing of a Plant Cellulose Synthase Gene, 691–705
L. Comai, A. P. Tyagi, K. Winter, R. Holmes-Davis, S. H. Reynolds, Y. Stevens, and B. Byers: Phenotypic Instability and Rapid Gene Silencing in Newly Formed Arabidopsis Allotetraploids, 1551–1567
T. Dalmay, A. Hamilton, E. Mueller, and D. C. Baulcombe: *Potato Virus X* Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing, 369–379
H. Hirochika, H. Okamoto, and T. Kakutani: Silencing of Retrotransposons in Arabidopsis and Reactivation by the *ddm1* Mutation, 357–368
E. Russinova and S. de Vries: Parental Contribution to Plant Embryos (Insight), 461–463
A. Steimer, P. Amedeo, K. Afsar, P. Fransz, O. M. Scheid, and J. Paszkowski: Endogenous Targets of Transcriptional Gene Silencing in Arabidopsis, 1165–1178
T. L. Stokes and E. J. Richards: Mum's the Word: MOM and Modifiers of Transcriptional Gene Silencing (In This Issue), 1003–1006

Gene traps
P. S. Springer: Gene Traps: Tools for Plant Development and Genomics, 1007–1020

GeneCalling analysis
W. Bruce, O. Folkerts, C. Garnaat, O. Crasta, B. Roth, and B. Bowen: Expression Profiling of the Maize Flavonoid Pathway Genes Controlled by Estradiol-Inducible Transcription Factors CRC and P, 65–79

Genomics
J. L. Bennetzen: Comparative Sequence Analysis of Plant Nuclear Genomes: Microcolinearity and Its Many Exceptions, 1021–1029
G. Blanc, A. Barakat, R. Guyot, R. Cooke, and M. Delseny: Extensive Duplication and Reshuffling in the Arabidopsis Genome, 1093–1101
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393
A. L. Casselman, J. Vrebalov, J. A. Conner, A. Singhal, J. Giovannoni, M. E. Nasrallah, and J. B. Nasrallah: Determining the Physical Limits of the Brassica *S* Locus by Recombinational Analysis, 23–33
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646
N. A. Eckardt: Sequencing the Rice Genome (Meeting Report), 2013–2017
S. L. Harmer and S. A. Kay: Microarrays: Determining the Balance of Cellular Transcription (In This Issue), 613–615
J. S. Heslop-Harrison: Comparative Genome Organization in Plants: From Sequence and Markers to Chromatin and Chromosomes, 617–635
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539
N. V. Raikhel, M. Nishimura, R. S. Quatrano, S. H. Howell, W. Davies, and D. Bowles: The Free Flow of Ideas, Information, and Materials (Editorial), 2297
M. Running, M. Scanlon, and N. Sinha: Maize Genetics 2000—And Beyond (Meeting Report), 829–835
E. Russinova and S. de Vries: Parental Contribution to Plant Embryos (Insight), 461–463
C. J. Schultz, K. L. Johnson, G. Currie, and A. Bacic: The Classical Arabinogalactan Protein Gene Family of Arabidopsis, 1751–1767
H. B. Smith: Proteomics: Broad Strokes of Expressionism? (In This Issue), 303–304
P. S. Springer: Gene Traps: Tools for Plant Development and Genomics, 1007–1020
H.-Y. Steiner, W. Song, L. Zhang, F. Naider, J. M. Becker, and G. Stacey: An Arabidopsis Peptide Transporter Is a Member of a New Class of Membrane Transport Proteins: Correction [**6,** 1289–1299], 2295
R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391
A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264

Gerbera hybrida
M. Kotilainen, P. Elomaa, A. Uimari, V. A. Albert, D. Yu, and T. H. Teeri: *GRCD1*, an *AGL2*-like MADS Box Gene, Participates in the C Function during Stamen Development in *Gerbera hybrida*, 1893–1902

Gerbera regulator of capitulum development 1
M. Kotilainen, P. Elomaa, A. Uimari, V. A. Albert, D. Yu, and T. H. Teeri: *GRCD1*, an *AGL2*-like MADS Box Gene, Participates in the C Function during Stamen Development in *Gerbera hybrida*, 1893–1902

Gibberellins
J. Fukazawa, T. Sakai, S. Ishida, I. Yamaguchi, Y. Kamiya, and Y. Takahashi: REPRESSION OF SHOOT GROWTH, a bZIP Transcriptional Activator, Regulates Cell Elongation by Controlling the Level of Gibberellins, 901–915

Glucan
T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826

Glucose translocator
A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801

γ-Glutamylcysteine synthetase
G. Creissen, J. Fermin, M. Fryer, B. Kular, N. Leyland, H. Reynolds, G. Pastori, F. Wellburn, N. Baker, A. Wellburn, and P. Mullineau: Elevated Glutatione Biosynthetic Capacity in the Chloroplasts of Transgenic Tobacco Paradoxically Causes Increased Oxidative Stress: Correction [**11,** 1277–1291], 301

Glutathione
G. Creissen, J. Fermin, M. Fryer, B. Kular, N. Leyland, H. Reynolds, G. Pastori, F. Wellburn, N. Baker, A. Wellburn, and P. Mullineau: Elevated Glutatione Biosynthetic Capacity in the Chloroplasts of Transgenic Tobacco Paradoxically Causes Increased Oxidative Stress: Correction [**11,** 1277–1291], 301
L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione *S*-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950
T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu, D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109

Glycogen
C. Jonak, D. Beisteiner, J. Beyerly, and H. Hirt: Wound-Induced Expression and Activation of WIG, a Novel Glycogen Synthase Kinase 3, 1467–1475
E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718

***GNOM* gene**
E. Russinova and S. de Vries: Parental Contribution to Plant Embryos (Insight), 461–463

GNOM protein
M. Grebe, J. Gadea, T. Steinmann, M. Kientz, J.-U. Rahfeld, K. Salchert, C. Koncz, and G. Jürgens: A Conserved Domain of the Arabidopsis GNOM Protein Mediates Subunit Interaction and Cyclophilin 5 Binding, 343–356

Golgi
V. Gomord and L. Faye: Reply: Glycobiology and the Plant Cell—A World of Information (Letter To The Editor), 1519–1521
S. Pagny, M. Cabanes-Macheteau, J. W. Gillikin, N. Leborgne-Castel, P. Lerouge, R. S. Boston, L. Faye, and V. Gomord: Protein Recycling from the Golgi Apparatus to the Endoplasmic Reticulum in Plants and Its Minor Contribution to Calreticulin Retention, 739–755
P. Pimpl and J. Denecke: ER Retention of Soluble Proteins: Retrieval, Retention, or Both? (Letter To The Editor), 1517–1519

Golgi apparatus
H. Batoko, H.-Q. Zheng, C. Hawes, and I. Moore: A Rab1 GTPase Is Required for Transport between the Endoplasmic Reticulum and Golgi Apparatus and for Normal Golgi Movement in Plants, 2201–2217
N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011
P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235

Gramineae
R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391

Grasses
M. Running, M. Scanlon, and N. Sinha: Maize Genetics 2000—And Beyond (Meeting Report), 829–835

Green fluorescent protein
H. Batoko, H.-Q. Zheng, C. Hawes, and I. Moore: A Rab1 GTPase Is Required for Transport between the Endoplasmic Reticulum and Golgi Apparatus and for Normal Golgi Movement in Plants, 2201–2217
M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201
T. Dalmay, A. Hamilton, E. Mueller, and D. C. Baulcombe: *Potato Virus X* Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing, 369–379
N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011
S. Yalovsky, M. Rodríguez-Concepción, K. Bracha, G. Toledo-Ortiz, and W. Gruissem: Prenylation of the Floral Transcription Factor APETALA1 Modulates Its Function, 1257–1266
J. Zuo, Q.-W. Niu, N. Nishizawa, Y. Wu, B. Kost, and N.-H. Chua: KORRIGAN, an Arabidopsis Endo-1,4-β-Glucanase, Localizes to the Cell Plate by Polarized Targeting and Is Essential for Cytokinesis, 1137–1152

Growth reorientation
J. Mathur and N.-H. Chua: Microtubule Stabilization Leads to Growth Reorientation in Arabidopsis Trichomes, 465–477

GTP Binding Proteins
J. McElver, D. Patton, M. Rumbaugh, C.-m. Liu, L. J. Yang, and D. Meinke: The *TITAN5* Gene of Arabidopsis Encodes a Protein Related to the ADP Ribosylation Factor Family of GTP Binding Proteins, 1379–1392

Guanine nucleotide exchange factor
M. Grebe, J. Gadea, T. Steinmann, M. Kientz, J.-U. Rahfeld, K. Salchert, C. Koncz, and G. Jürgens: A Conserved Domain of the Arabidopsis GNOM Protein Mediates Subunit Interaction and Cyclophilin 5 Binding, 343–356

Gynoecium development
Z. Liu, R. G. Franks, and V. P. Klink: Regulation of Gynoecium Marginal Tissue Formation by *LEUNIG* and *AINTEGUMENTA*, 1879–1891

H

Haplotypes
D. Charlesworth: How Can Two-Gene Models of Self-Incompatibility Generate New Specificities? (Letters To The Editor), 309–310
D. P. Matton, D. T. Luu, D. Morse, and M. Cappadocia: Reply: Establishing a Paradigm for the Generation of New *S* Alleles (Letters To The Editor), 313–315
M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312

H^+-ATPase
R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546

***Hd1* gene**
N. A. Eckardt: Giving Rice the Time of Day: Molecular Identification of a Major Photoperiod Sensitivity Quantitative Trait Locus (In This Issue), 2299–2301
M. Yano, Y. Katayose, M. Ashikari, U. Yamanouchi, L. Monna, T. Fuse, T. Baba, K. Yamamoto, Y. Umehara, Y. Nagamura, and T. Sasaki: *Hd1*, a Major Photoperiod Sensitivity Quantitative Trait Locus in Rice, Is Closely Related to the Arabidopsis Flowering Time Gene *CONSTANS*, 2473–2483

Heat shock proteins
W. B. Gurley: HSP101: A Key Component for the Acquisition of Thermotolerance in Plants (In This Issue), 457–460
J. Ling, D. R. Wells, R. L. Tanguay, L. F. Dickey, W. F. Thompson, and D. R. Gallie: Heat Shock Protein HSP101 Binds to the *Fed-1* Internal Light Regulatory Element and Mediates Its High Translational Activity, 1213–1227
T. May and J. Soll: 14-3-3 Proteins Form a Guidance Complex with Chloroplast Precursor Proteins in Plants, 53–63
C. Queitsch, S.-W. Hong, E. Vierling, and S. Lindquist: Heat Shock Protein 101 Plays a Crucial Role in Thermotolerance in Arabidopsis, 479–492
S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582

Heat stress
P. Döring, E. Treuter, C. Kistner, R. Lyck, A. Chen, and L. Nover: The Role of AHA Motifs in the Activator Function of Tomato Heat Stress Transcription Factors HsfA1 and HsfA2, 265–278
W. B. Gurley: HSP101: A Key Component for the Acquisition of Thermotolerance in Plants (In This Issue), 457–460
C. Queitsch, S.-W. Hong, E. Vierling, and S. Lindquist: Heat Shock Protein 101 Plays a Crucial Role in Thermotolerance in Arabidopsis, 479–492

Heterochromatin
Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100

Heterodimers
K. M. Culligan and J. B. Hays: Arabidopsis MutS Homologs—AtMSH2, AtMSH3, AtMSH6, and a Novel AtMSH7—Form Three Distinct Protein Heterodimers with Different Specificities for Mismatched DNA, 991–1002

High-density oligonucleotide DNA arrays
J. I. Spiegelman, M. N. Mindrinos, C. Fankhauser, D. Richards, J. Lutes, J. Chory, and P. J. Oefner: Cloning of the Arabidopsis *RSF1* Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography, 2485–2498

High-irradiance responses
C. Büche, C. Poppe, E. Schäfer, and T. Kretsch: *eid1*: A New Arabidopsis Mutant Hypersensitive in Phytochrome A–Dependent High-Irradiance Responses, 547–558
Histones
Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100
Host gene expression
Z. Havelda and A. J. Maule: Complex Spatial Responses to Cucumber Mosaic Virus Infection in Susceptible *Cucurbita pepo* Cotyledons, 1975–1985
***HRT* gene**
M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676
P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925
Hypersensitive response
M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676
P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690
M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646
S. Seo, M. Okamoto, T. Iwai, M. Iwano, K. Fukui, A. Isogai, N. Nakajima, and Y. Ohashi: Reduced Levels of Chloroplast FtsH Protein in Tobacco Mosaic Virus–Infected Tobacco Leaves Accelerate the Hypersensitive Reaction, 917–932
Hypocotyl development
M. Fagard, T. Desnos, T. Desprez, F. Goubet, G. Refregier, G. Mouille, M. McCann, C. Rayon, S. Vernhettes, and H. Höfte: *PROCUSTE1* Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis, 2409–2423
***hyponastic leaves* mutant**
C. Lu and N. Fedoroff: A Mutation in the Arabidopsis *HYL1* Gene Encoding a dsRNA Binding Protein Affects Responses to Abscisic Acid, Auxin, and Cytokinin, 2351–2365

I

***IAR1* gene**
J. Lasswell, L. E. Rogg, D. C. Nelson, C. Rongey, and B. Bartel: Cloning and Characterization of *IAR1*, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis, 2395–2408
Impatiens balsamina
F. Tooke and N. H. Battey: A Leaf-Derived Signal Is a Quantitative Determinant of Floral Form in Impatiens, 1837–1847
Indole-3-acetic acid
J. Lasswell, L. E. Rogg, D. C. Nelson, C. Rongey, and B. Bartel: Cloning and Characterization of *IAR1*, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis, 2395–2408
Inner envelope membrane
A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801
Insect feeding
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
***INTERFASCICULAR FIBERLESS1* gene**
O. J. Ratcliffe, J. L. Riechmann, and J. Z. Zhang: *INTERFASCICULAR FIBERLESS1* Is the Same Gene as *REVOLUTA* (Letters To The Editor), 315–317
Internal light regulatory element
J. Ling, D. R. Wells, R. L. Tanguay, L. F. Dickey, W. F. Thompson, and D. R. Gallie: Heat Shock Protein HSP101 Binds to the *Fed-1* Internal Light Regulatory Element and Mediates Its High Translational Activity, 1213–1227
Internode elongation
C. Yamamuro, Y. Ihara, X. Wu, T. Noguchi, S. Fujioka, S. Takatsuto, M. Ashikari, H. Kitano, and M. Matsuoka: Loss of Function of a Rice *brassinosteroid insensitive1* Homolog Prevents Internode Elongation and Bending of the Lamina Joint, 1591–1605
Invertase
V. Gomord and L. Faye: Reply: Glycobiology and the Plant Cell—A World of Information (Letter To The Editor), 1519–1521
P. Pimpl and J. Denecke: ER Retention of Soluble Proteins: Retrieval, Retention, or Both? (Letter To The Editor), 1517–1519
***irregular xylem1* mutant**
N. G. Taylor, S. Laurie, and S. R. Turner: Multiple Cellulose Synthase Catalytic Subunits Are Required for Cellulose Synthesis in Arabidopsis, 2529–2539
Isoflavone *O*-methyltransferase
X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-O-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702
Isoflavonoid biosynthesis
X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-O-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702

J

J domain
G. Morisawa, A. Han-yama, I. Moda, A. Tamai, M. Iwabuchi, and T. Meshi: AHM1, a Novel Type of Nuclear Matrix–Localized, MAR Binding Protein with a Single AT Hook and a J Domain–Homologous Region, 1903–1916
Jasmonate
T. Asai, J. M. Stone, J. E. Heard, Y. Kovtun, P. Yorgey, J. Sheen, and F. M. Ausubel: Fumonisin B1–Induced Cell Death in Arabidopsis Protoplasts Requires Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways, 1823–1835
K. Overmyer, H. Tuominen, R. Kettunen, C. Betz, C. Langebartels, H. Sandermann, Jr., and J. Kangasjärvi: Ozone-Sensitive Arabidopsis *rcd1* Mutant Reveals Opposite Roles for Ethylene and Jasmonate Signaling Pathways in Regulating Superoxide-Dependent Cell Death, 1849–1862
Jasmonic acid
J. D. Clarke, S. M. Volko, H. Ledford, F. M. Ausubel, and X. Dong: Roles of Salicylic Acid, Jasmonic Acid, and Ethylene in *cpr*-Induced Resistance in Arabidopsis, 2175–2190
M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646
P. M. Sanders, P. Y. Lee, C. Biesgen, J. D. Boone, T. P. Beals, E. W. Weiler, and R. B. Goldberg: The Arabidopsis *DELAYED DEHISCENCE1* Gene Encodes an Enzyme in the Jasmonic Acid Synthesis Pathway, 1041–1061
C. Wang, C. A. Zien, M. Afitlhile, R. Welti, D. F. Hildebrand, and X. Wang: Involvement of Phospholipase D in Wound-Induced Accumulation of Jasmonic Acid in Arabidopsis, 2237–2246

K

Kinases
I. B. Heath and A. Geitmann: Cell Biology of Plant and Fungal Tip Growth, Getting to the Point (Meeting Report), 1513–1517. Correction, 2295
Kinesin-like calmodulin binding protein
G. Jürgens: Cytokinesis: The Art of Partitioning (In This Issue), 827–829

J. W. Vos, F. Safadi, A. S. N. Reddy, and P. K. Hepler: The Kinesin-like Calmodulin Binding Protein Is Differentially Involved in Cell Division, 979–990

Kinesins

G. Cai, S. Romagnoli, A. Moscatelli, E. Ovidi, G. Gambellini, A. Tiezzi, and M. Cresti: Identification and Characterization of a Novel Microtubule-Based Motor Associated with Membranous Organelles in Tobacco Pollen Tubes, 1719–1736

KORRIGAN

J. Zuo, Q.-W. Niu, N. Nishizawa, Y. Wu, B. Kost, and N.-H. Chua: KORRIGAN, an Arabidopsis Endo-1,4-β-Glucanase, Localizes to the Cell Plate by Polarized Targeting and Is Essential for Cytokinesis, 1137–1152

L

***L* locus**

J. E. Luck, G. J. Lawrence, P. N. Dodds, K. W. Shepherd, and J. G. Ellis: Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination, 1367–1377

Leaf development

C. W. Gourlay, J. M. I. Hofer, and T. H. N. Ellis: Pea Compound Leaf Architecture Is Regulated by Interactions among the Genes *UNIFOLIATA*, *COCHLEATA*, *AFILA*, and *TENDRILLESS*, 1279–1294

D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518

H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159

Leaf primordia

J.-I. Itoh, H. Kitano, M. Matsuoka, and Y. Nagato: *SHOOT ORGANIZATION* Genes Regulate Shoot Apical Meristem Organization and the Pattern of Leaf Primordium Initiation in Rice, 2161–2174

leafy hull sterile1

J.-S. Jeon, S. Jang, S. Lee, J. Nam, C. Kim, S.-H. Lee, Y.-Y. Chung, S.-R. Kim, Y. H. Lee, Y.-G. Cho, and G. An: *leafy hull sterile1* Is a Homeotic Mutation in a Rice MADS Box Gene Affecting Rice Flower Development, 871–884

Lepidoptera

T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040

Leucine-rich repeat proteins

M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676

C.-F. Hwang, A. V. Bhakta, G. M. Truesdell, W. M. Pudlo, and V. M. Williamson: Evidence for a Role of the N Terminus and Leucine-Rich Repeat Region of the *Mi* Gene Product in Regulation of Localized Cell Death, 1319–1329

J. E. Luck, G. J. Lawrence, P. N. Dodds, K. W. Shepherd, and J. G. Ellis: Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination, 1367–1377

Y. Tao, F. Yuan, R. T. Leister, F. M. Ausubel, and F. Katagiri: Mutational Analysis of the Arabidopsis Nucleotide Binding Site–Leucine-Rich Repeat Resistance Gene *RPS2*, 2541–2554

LEUNIG

M. K. Deyholos and L. E. Sieburth: Separable Whorl-Specific Expression and Negative Regulation by Enhancer Elements within the *AGAMOUS* Second Intron, 1799–1810

Z. Liu, R. G. Franks, and V. P. Klink: Regulation of Gynoecium Marginal Tissue Formation by *LEUNIG* and *AINTEGUMENTA*, 1879–1891

***Lhcb1*2* promoter**

P. D. Cerdán, R. J. Staneloni, J. Ortega, M. M. Bunge, M. J. Rodriguez-Batiller, R. A. Sánchez, and J. J. Casal: Sustained but Not Transient Phytochrome A Signaling Targets a Region of an *Lhcb1*2* Promoter Not Necessary for Phytochrome B Action, 1203–1211

Ligand binding

X. Cao, S. W. Rogers, J. Butler, L. Beevers, and J. C. Rogers: Structural Requirements for Ligand Binding by a Probable Plant Vacuolar Sorting Receptor, 493–506

Light signaling

S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309

C. Büche, C. Poppe, E. Schäfer, and T. Kretsch: *eid1*: A New Arabidopsis Mutant Hypersensitive in Phytochrome A–Dependent High-Irradiance Responses, 547–558

A. B. Cahoon and M. P. Timko: *yellow-in-the-dark* Mutants of Chlamydomonas Lack the CHLL Subunit of Light-Independent Protochlorophyllide Reductase, 559–568

D. Cao, Y. Lin, and C.-L. Cheng: Genetic Interactions between the Chlorate-Resistant Mutant *cr88* and the Photomorphogenic Mutants *cop1* and *hy5*, 199–210

P. D. Cerdán, R. J. Staneloni, J. Ortega, M. M. Bunge, M. J. Rodriguez-Batiller, R. A. Sánchez, and J. J. Casal: Sustained but Not Transient Phytochrome A Signaling Targets a Region of an *Lhcb1*2* Promoter Not Necessary for Phytochrome B Action, 1203–1211

P. F. Devlin and S. A. Kay: Cryptochromes Are Required for Phytochrome Signaling to the Circadian Clock but Not for Rhythmicity, 2499–2509

A. Hisada, H. Hanzawa, J. L. Weller, A. Nagatani, J. B. Reid, and M. Furuya: Light-Induced Nuclear Translocation of Endogenous Pea Phytochrome A Visualized by Immunocytochemical Procedures, 1063–1078

A. Rohde, R. De Rycke, T. Beeckman, G. Engler, M. Van Montagu, and W. Boerjan: ABI3 Affects Plastid Differentiation in Dark-Grown Arabidopsis Seedlings, 35–52

T. Sakai, T. Wada, S. Ishiguro, and K. Okada: RPT2: A Signal Transducer of the Phototropic Response in Arabidopsis, 225–236

***light-independent photomorphogenesis1* mutant**

J. A. Sullivan and J. C. Gray: The Pea *light-independent photomorphogenesis1* Mutant Results from Partial Duplication of the *COP1* Generating an Internal Promoter and Producing Two Distinct Transcripts, 1927–1937

Lily

J.-C. Mollet, S.-Y. Park, E. A. Nothnagel, and E. M. Lord: A Lily Stylar Pectin Is Necessary for Pollen Tube Adhesion to an in Vitro Stylar Matrix, 1737–1749

S.-Y. Park, G.-Y. Jauh, J.-C. Mollet, K. J. Eckard, E. A. Nothnagel, L. L. Walling, and E. M. Lord: A Lipid Transfer–like Protein Is Necessary for Lily Pollen Tube Adhesion to an in Vitro Stylar Matrix, 151–163

***lip1* mutant**

J. A. Sullivan and J. C. Gray: The Pea *light-independent photomorphogenesis1* Mutant Results from Partial Duplication of the *COP1* Generating an Internal Promoter and Producing Two Distinct Transcripts, 1927–1937

Lipids

A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008

C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798

S.-Y. Park, G.-Y. Jauh, J.-C. Mollet, K. J. Eckard, E. A. Nothnagel, L. L. Walling, and E. M. Lord: A Lipid Transfer–like Protein Is Necessary for Lily Pollen Tube Adhesion to an in Vitro Stylar Matrix, 151–163

Lipoxygenase 2

C. Wang, C. A. Zien, M. Afitlhile, R. Welti, D. F. Hildebrand, and X. Wang: Involvement of Phospholipase D in Wound-Induced Accumulation of Jasmonic Acid in Arabidopsis, 2237–2246

LONG HYPOCOTYL5

D. Cao, Y. Lin, and C.-L. Cheng: Genetic Interactions between the Chlorate-Resistant Mutant *cr88* and the Photomorphogenic Mutants *cop1* and *hy5*, 199–210

Lycopersicon esculentum

R. S. van der Hoeven, A. J. Monforte, D. Breeden, S. D. Tanksley, and J. C. Steffens: Genetic Control and Evolution of Sesquiterpene Biosynthesis in *Lycopersicon esculentum* and *L. hirsutum*, 2283–2294

Lycopersicon hirsutum
R. S. van der Hoeven, A. J. Monforte, D. Breeden, S. D. Tanksley, and J. C. Steffens: Genetic Control and Evolution of Sesquiterpene Biosynthesis in *Lycopersicon esculentum* and *L. hirsutum*, 2283–2294

M

MADS box gene
J.-S. Jeon, S. Jang, S. Lee, J. Nam, C. Kim, S.-H. Lee, Y.-Y. Chung, S.-R. Kim, Y. H. Lee, Y.-G. Cho, and G. An: *leafy hull sterile1* Is a Homeotic Mutation in a Rice MADS Box Gene Affecting Rice Flower Development, 871–884

Magnaporthe grisea
G. T. Bryan, K.-S. Wu, L. Farrall, Y. Jia, H. P. Hershey, S. A. McAdams, K. N. Faulk, G. K. Donaldson, R. Tarchini, and B. Valent: A Single Amino Acid Difference Distinguishes Resistant and Susceptible Alleles of the Rice Blast Resistance Gene *Pi-ta*, 2033–2045
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032
E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718

Maize
W. Bruce, O. Folkerts, C. Garnaat, O. Crasta, B. Roth, and B. Bowen: Expression Profiling of the Maize Flavonoid Pathway Genes Controlled by Estradiol-Inducible Transcription Factors CRC and P, 65–79
J. E. Dorweiler, C. C. Carey, K. M. Kubo, J. B. Hollick, J. L. Kermicle, and V. L. Chandler: *mediator of paramutation1* Is Required for Establishment and Maintenance of Paramutation at Multiple Maize Loci, 2101–2118
L. Essers, R. H. Adolphs, and R. Kunze: A Highly Conserved Domain of the Maize *Activator* Transposase Is Involved in Dimerization, 211–223
D. R. Kovar, B. K. Drøbak, and C. J. Staiger: Maize Profilin Isoforms Are Functionally Distinct, 583–598
J. Lim, Y. Helariutta, C. D. Specht, J. Jung, L. Sims, W. B. Bruce, S. Diehn, and P. N. Benfey: Molecular Analysis of the *SCARECROW* Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems, 1307–1318
S. Pan, E. Czarnecka-Verner, and W. B. Gurley: Role of the TATA Binding Protein–Transcription Factor IIB Interaction in Supporting Basal and Activated Transcription in Plant Cells, 125–135
T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040
M. N. Raizada and V. Walbot: The Late Developmental Pattern of *Mu* Transposon Excision Is Conferred by a Cauliflower Mosaic Virus 35S–Driven MURA cDNA in Transgenic Maize, 5–21
M. Running, M. Scanlon, and N. Sinha: Maize Genetics 2000—And Beyond (Meeting Report), 829–835
J.-U. Sutter, U. Homann, and G. Thiel: Ca^{2+}-Stimulated Exocytosis in Maize Coleoptile Cells, 1127–1136
R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391
A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264
N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247
A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801
P. Zhang, S. Chopra, and T. Peterson: A Segmental Gene Duplication Generated Differentially Expressed *myb*-Homologous Genes in Maize, 2311–2322

Male fertility
R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546

MAP kinases
Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343
E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718

MAR binding protein
G. Morisawa, A. Han-yama, I. Moda, A. Tamai, M. Iwabuchi, and T. Meshi: AHM1, a Novel Type of Nuclear Matrix–Localized, MAR Binding Protein with a Single AT Hook and a J Domain–Homologous Region, 1903–1916

Marginal tissue
Z. Liu, R. G. Franks, and V. P. Klink: Regulation of Gynoecium Marginal Tissue Formation by *LEUNIG* and *AINTEGUMENTA*, 1879–1891

Mass spectrometry
J.-B. Peltier, G. Friso, D. E. Kalume, P. Roepstorff, F. Nilsson, I. Adamska, and K. J. van Wijk: Proteomics of the Chloroplast: Systematic Identification and Targeting Analysis of Lumenal and Peripheral Thylakoid Proteins, 319–341
H. B. Smith: Proteomics: Broad Strokes of Expressionism? (In This Issue), 303–304

Mastoparan
W. Frank, T. Munnik, K. Kerkmann, F. Salamini, and D. Bartels: Water Deficit Triggers Phospholipase D Activity in the Resurrection Plant *Craterostigma plantagineum*, 111–123

Matrix attachment regions
G. Morisawa, A. Han-yama, I. Moda, A. Tamai, M. Iwabuchi, and T. Meshi: AHM1, a Novel Type of Nuclear Matrix–Localized, MAR Binding Protein with a Single AT Hook and a J Domain–Homologous Region, 1903–1916
A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264

***MEDEA* gene**
E. Russinova and S. de Vries: Parental Contribution to Plant Embryos (Insight), 461–463
R. Yadegari, T. Kinoshita, O. Lotan, G. Cohen, A. Katz, Y. Choi, A. Katz, K. Nakashima, J. J. Harada, R. B. Goldberg, R. L. Fischer, and N. Ohad: Mutations in the *FIE* and *MEA* Genes That Encode Interacting Polycomb Proteins Cause Parent-of-Origin Effects on Seed Development by Distinct Mechanisms, 2367–2381

***mediator of paramutation1-1* mutant**
J. E. Dorweiler, C. C. Carey, K. M. Kubo, J. B. Hollick, J. L. Kermicle, and V. L. Chandler: *mediator of paramutation1* Is Required for Establishment and Maintenance of Paramutation at Multiple Maize Loci, 2101–2118

Medicago truncatula
R. Catoira, C. Galera, F. de Billy, R. V. Penmetsa, E.-P. Journet, F. Maillet, C. Rosenberg, D. Cook, C. Gough, and J. Dénarié: Four Genes of *Medicago truncatula* Controlling Components of a Nod Factor Transduction Pathway, 1647–1665

Membrane capacitance
J.-U. Sutter, U. Homann, and G. Thiel: Ca^{2+}-Stimulated Exocytosis in Maize Coleoptile Cells, 1127–1136

Membrane insertion
L. Zhang, V. Paakkarinen, K. J. van Wijk, and E.-M. Aro: Biogenesis of the Chloroplast-Encoded D1 Protein: Regulation of Translation Elongation, Insertion, and Assembly into Photosystem II, 1769–1781

Membrane proteins
M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201

Membrane trafficking
H. Batoko, H.-Q. Zheng, C. Hawes, and I. Moore: A Rab1 GTPase Is Required for Transport between the Endoplasmic Reticulum

and Golgi Apparatus and for Normal Golgi Movement in Plants, 2201–2217

Meristemoids

M. Geisler, J. Nadeau, and F. D. Sack: Oriented Asymmetric Divisions That Generate the Stomatal Spacing Pattern in Arabidopsis Are Disrupted by the *too many mouths* Mutation, 2075–2086

Meristems

J. Lim, Y. Helariutta, C. D. Specht, J. Jung, L. Sims, W. B. Bruce, S. Diehn, and P. N. Benfey: Molecular Analysis of the *SCARECROW* Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems, 1307–1318

H. Sakai, B. A. Krizek, S. E. Jacobsen, and E. M. Meyerowitz: Regulation of *SUP* Expression Identifies Multiple Regulators Involved in Arabidopsis Floral Meristem Development, 1607–1618

S. Yalovsky, A. Kulukian, M. Rodríguez-Concepción, C. A. Young, and W. Gruissem: Functional Requirement of Plant Farnesyltransferase during Development in Arabidopsis, 1267–1278

Metal binding pterin

G. Schwarz, J. Schulze, F. Bittner, T. Eilers, J. Kuper, G. Bollmann, A. Nerlich, H. Brinkmann, and R. R. Mendel: The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton, 2455–2471

Methyl benzoate biosynthesis

N. Dudareva, L. M. Murfitt, C. J. Mann, N. Gorenstein, N. Kolosova, C. M. Kish, C. Bonham, and K. Wood: Developmental Regulation of Methyl Benzoate Biosynthesis and Emission in Snapdragon Flowers, 949–961

Methylation

H. Hirochika, H. Okamoto, and T. Kakutani: Silencing of Retrotransposons in Arabidopsis and Reactivation by the *ddm1* Mutation, 357–368

R. Vinkenoog, M. Spielman, S. Adams, R. L. Fischer, H. G. Dickinson, and R. J. Scott: Hypomethylation Promotes Autonomous Endosperm Development and Rescues Postfertilization Lethality in *fie* Mutants, 2271–2282

***Mi* gene**

C.-F. Hwang, A. V. Bhakta, G. M. Truesdell, W. M. Pudlo, and V. M. Williamson: Evidence for a Role of the N Terminus and Leucine-Rich Repeat Region of the *Mi* Gene Product in Regulation of Localized Cell Death, 1319–1329

Microarrays

A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661

S. L. Harmer and S. A. Kay: Microarrays: Determining the Balance of Cellular Transcription (In This Issue), 613–615

P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719

R. Wang, K. Guegler, S. T. LaBrie, and N. M. Crawford: Genomic Analysis of a Nutrient Response in Arabidopsis Reveals Diverse Expression Patterns and Novel Metabolic and Potential Regulatory Genes Induced by Nitrate, 1491–1509

Microcolinearity

J. L. Bennetzen: Comparative Sequence Analysis of Plant Nuclear Genomes: Microcolinearity and Its Many Exceptions, 1021–1029

Microtubules

P. Binarová, V. Cenklová, B. Hause, E. Kubátová, M. Lysák, J. Doležel, L. Bögre, and P. Dráber: Nuclear γ-Tubulin during Acentriolar Plant Mitosis, 433–442

G. Cai, S. Romagnoli, A. Moscatelli, E. Ovidi, G. Gambellini, A. Tiezzi, and M. Cresti: Identification and Characterization of a Novel Microtubule-Based Motor Associated with Membranous Organelles in Tobacco Pollen Tubes, 1719–1736

J. Mathur and N.-H. Chua: Microtubule Stabilization Leads to Growth Reorientation in Arabidopsis Trichomes, 465–477

Miniature inverted repeat transposable elements (MITES)

A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264

Mini-phragmoplasts

M. Otegui and L. A. Staehelin: Syncytial-Type Cell Plates: A Novel Kind of Cell Plate Involved in Endosperm Cellularization of Arabidopsis, 933–947

Mismatch repair

K. M. Culligan and J. B. Hays: Arabidopsis MutS Homologs—AtMSH2, AtMSH3, AtMSH6, and a Novel AtMSH7—Form Three Distinct Protein Heterodimers with Different Specificities for Mismatched DNA, 991–1002

MITES (miniature inverted repeat transposable elements)

A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264

Mitogen-activated protein kinase kinase

S. Kiegerl, F. Cardinale, C. Siligan, A. Gross, E. Baudouin, A. Liwosz, S. Eklöf, S. Till, L. Bögre, H. Hirt, and I. Meskiene: SIMKK, a Mitogen-Activated Protein Kinase (MAPK) Kinase, Is a Specific Activator of the Salt Stress–Induced MAPK, SIMK, 2247–2258

Mitogen-activated protein kinases

Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343

E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718

Mitosis

P. Binarová, V. Cenklová, B. Hause, E. Kubátová, M. Lysák, J. Doležel, L. Bögre, and P. Dráber: Nuclear γ-Tubulin during Acentriolar Plant Mitosis, 433–442

Molybdenum cofactor biosynthesis

G. Schwarz, J. Schulze, F. Bittner, T. Eilers, J. Kuper, G. Bollmann, A. Nerlich, H. Brinkmann, and R. R. Mendel: The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton, 2455–2471

Morphogenesis

P. Sieber, M. Schorderet, U. Ryser, A. Buchala, P. Kolattukudy, J.-P. Métraux, and C. Nawrath: Transgenic Arabidopsis Plants Expressing a Fungal Cutinase Show Alterations in the Structure and Properties of the Cuticle and Postgenital Organ Fusions, 721–737

Morphology

R. M. Harper, E. L. Stowe-Evans, D. R. Luesse, H. Muto, K. Tatematsu, M. K. Watahiki, K. Yamamoto, and E. Liscum: The *NPH4* Locus Encodes the Auxin Response Factor ARF7, a Conditional Regulator of Differential Growth in Aerial Arabidopsis Tissue, 757–770

***mosaic death1* mutant**

Z. Mou, Y. He, Y. Dai, X. Liu, and J. Li: Deficiency in Fatty Acid Synthase Leads to Premature Cell Death and Dramatic Alterations in Plant Morphology, 405–417

Motor proteins

G. Cai, S. Romagnoli, A. Moscatelli, E. Ovidi, G. Gambellini, A. Tiezzi, and M. Cresti: Identification and Characterization of a Novel Microtubule-Based Motor Associated with Membranous Organelles in Tobacco Pollen Tubes, 1719–1736

***MuDR* elements**

M. N. Raizada and V. Walbot: The Late Developmental Pattern of *Mu* Transposon Excision Is Conferred by a Cauliflower Mosaic Virus 35S–Driven MURA cDNA in Transgenic Maize, 5–21

***Mutator* elements**

M. N. Raizada and V. Walbot: The Late Developmental Pattern of *Mu* Transposon Excision Is Conferred by a Cauliflower Mosaic Virus 35S–Driven MURA cDNA in Transgenic Maize, 5–21

MutS homologs

K. M. Culligan and J. B. Hays: Arabidopsis MutS Homologs—AtMSH2, AtMSH3, AtMSH6, and a Novel AtMSH7—Form Three Distinct Protein Heterodimers with Different Specificities for Mismatched DNA, 991–1002

***myb* genes**
P. Zhang, S. Chopra, and T. Peterson: A Segmental Gene Duplication Generated Differentially Expressed *myb*-Homologous Genes in Maize, 2311–2322
MYB-domain proteins
C. Spelt, F. Quattrocchio, J. N. M. Mol, and R. Koes: *anthocyanin1* of Petunia Encodes a Basic Helix-Loop-Helix Protein That Directly Activates Transcription of Structural Anthocyanin Genes, 1619–1631
MYB-related factors
K. Sugimoto, S. Takeda, and H. Hirochika: MYB-Related Transcription Factor NtMYB2 Induced by Wounding and Elicitors is a Regulator of the Tobacco Retrotransposon *Tto1* and Defense-Related Genes, 2511–2527
Mycorrhization
R. Catoira, C. Galera, F. de Billy, R. V. Penmetsa, E.-P. Journet, F. Maillet, C. Rosenberg, D. Cook, C. Gough, and J. Dénarié: Four Genes of *Medicago truncatula* Controlling Components of a Nod Factor Transduction Pathway, 1647–1665
Myristoylation
M. Ishitani, J. Liu, U. Halfter, C.-S. Kim, W. Shi, and J.-K. Zhu: SOS3 Function in Plant Salt Tolerance Requires N-Myristoylation and Calcium Binding, 1667–1677

N

NAC protein
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925
***Nar1* gene**
J. Rexach, E. Fernández, and A. Galván: The *Chlamydomonas reinhardtii Nar1* Gene Encodes a Chloroplast Membrane Protein Involved in Nitrite Transport, 1441–1453
Necrotrophy
M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589
Nicotiana benthamiana
R. A. Burton, D. M. Gibeaut, A. Bacic, K. Findlay, K. Roberts, A. Hamilton, D. C. Baulcombe, and G. B. Fincher: Virus-Induced Silencing of a Plant Cellulose Synthase Gene, 691–705
C.-F. Hwang, A. V. Bhakta, G. M. Truesdell, W. M. Pudlo, and V. M. Williamson: Evidence for a Role of the N Terminus and Leucine-Rich Repeat Region of the *Mi* Gene Product in Regulation of Localized Cell Death, 1319–1329
M. R. Morra and I. T. D. Petty: Tissue Specificity of Geminivirus Infection Is Genetically Determined, 2259–2270
Nicotiana plumbaginifolia
G. Schwarz, J. Schulze, F. Bittner, T. Eilers, J. Kuper, G. Bollmann, A. Nerlich, H. Brinkmann, and R. R. Mendel: The Molybdenum Cofactor Biosynthetic Protein Cnx1 Complements Molybdate-Repairable Mutants, Transfers Molybdenum to the Metal Binding Pterin, and Is Associated with the Cytoskeleton, 2455–2471
***NIM1* gene**
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290
H. B. Smith: Signal Transduction in Systemic Acquired Resistance (In This Issue), 179–181
Nitrate-responsive genes
R. Wang, K. Guegler, S. T. LaBrie, and N. M. Crawford: Genomic Analysis of a Nutrient Response in Arabidopsis Reveals Diverse Expression Patterns and Novel Metabolic and Potential Regulatory Genes Induced by Nitrate, 1491–1509
Nitrite transport
J. Rexach, E. Fernández, and A. Galván: The *Chlamydomonas reinhardtii Nar1* Gene Encodes a Chloroplast Membrane Protein Involved in Nitrite Transport, 1441–1453
Nod factors
R. Catoira, C. Galera, F. de Billy, R. V. Penmetsa, E.-P. Journet, F. Maillet, C. Rosenberg, D. Cook, C. Gough, and J. Dénarié: Four Genes of *Medicago truncatula* Controlling Components of a Nod Factor Transduction Pathway, 1647–1665
***NONPHOTOTROPIC HYPOCOTYL* genes**
T. Sakai, T. Wada, S. Ishiguro, and K. Okada: RPT2: A Signal Transducer of the Phototropic Response in Arabidopsis, 225–236
***NPH4* gene**
R. M. Harper, E. L. Stowe-Evans, D. R. Luesse, H. Muto, K. Tatematsu, M. K. Watahiki, K. Yamamoto, and E. Liscum: The *NPH4* Locus Encodes the Auxin Response Factor ARF7, a Conditional Regulator of Differential Growth in Aerial Arabidopsis Tissue, 757–770
***NPR1* gene**
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290
H. B. Smith: Signal Transduction in Systemic Acquired Resistance (In This Issue), 179–181
NPR1 protein
M. Kinkema, W. Fan, and X. Dong: Nuclear Localization of NPR1 Is Required for Activation of *PR* Gene Expression, 2339–2350
Nuclear envelope
D. A. Collings, C. N. Carter, J. C. Rink, A. C. Scott, S. E. Wyatt, and N. S. Allen: Plant Nuclei Can Contain Extensive Grooves and Invaginations, 2425–2439
Nuclear localization
T. D. Bunney, P. A. C. Watkins, A. F. Beven, P. J. Shaw, L. E. Hernandez, G. P. Lomonossoff, M. Shanks, J. Peart, and B. K. Drobak: Association of Phosphatidylinositol 3-Kinase with Nuclear Transcription Sites in Higher Plants, 1679–1687
I. Heilmann, J. Stevenson-Paulik, and I. Y. Perera: Plant PtdIns 3-Kinase Goes Nuclear (In This Issue), 1511–1512
M. Kinkema, W. Fan, and X. Dong: Nuclear Localization of NPR1 Is Required for Activation of *PR* Gene Expression, 2339–2350
Nuclear γ-tubulin
P. Binarová, V. Cenklová, B. Hause, E. Kubátová, M. Lysák, J. Doležel, L. Bögre, and P. Dráber: Nuclear γ-Tubulin during Acentriolar Plant Mitosis, 433–442
Nucleotide binding site
Y. Tao, F. Yuan, R. T. Leister, F. M. Ausubel, and F. Katagiri: Mutational Analysis of the Arabidopsis Nucleotide Binding Site–Leucine-Rich Repeat Resistance Gene *RPS2*, 2541–2554
Nucleus
D. A. Collings, C. N. Carter, J. C. Rink, A. C. Scott, S. E. Wyatt, and N. S. Allen: Plant Nuclei Can Contain Extensive Grooves and Invaginations, 2425–2439
J. S. Heslop-Harrison: Comparative Genome Organization in Plants: From Sequence and Markers to Chromatin and Chromosomes, 617–635
A. Hisada, H. Hanzawa, J. L. Weller, A. Nagatani, J. B. Reid, and M. Furuya: Light-Induced Nuclear Translocation of Endogenous Pea Phytochrome A Visualized by Immunocytochemical Procedures, 1063–1078

O

OEP14 protein
S.-L. Tu and H.-m. Li: Insertion of OEP14 into the Outer Envelope Membrane Is Mediated by Proteinaceous Components of Chloroplasts, 1951–1959
Oligopeptide elicitor Pep-13
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
Onion
D. A. Collings, C. N. Carter, J. C. Rink, A. C. Scott, S. E. Wyatt, and N. S. Allen: Plant Nuclei Can Contain Extensive Grooves and Invaginations, 2425–2439
M. Kinkema, W. Fan, and X. Dong: Nuclear Localization of NPR1 Is Required for Activation of *PR* Gene Expression, 2339–2350
Orchid
H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159

Organ bending
R. M. Harper, E. L. Stowe-Evans, D. R. Luesse, H. Muto, K. Tatematsu, M. K. Watahiki, K. Yamamoto, and E. Liscum: The *NPH4* Locus Encodes the Auxin Response Factor ARF7, a Conditional Regulator of Differential Growth in Aerial Arabidopsis Tissue, 757–770

Organ fusions
P. Sieber, M. Schorderet, U. Ryser, A. Buchala, P. Kolattukudy, J.-P. Métraux, and C. Nawrath: Transgenic Arabidopsis Plants Expressing a Fungal Cutinase Show Alterations in the Structure and Properties of the Cuticle and Postgenital Organ Fusions, 721–737

Organelle movement
G. Cai, S. Romagnoli, A. Moscatelli, E. Ovidi, G. Gambellini, A. Tiezzi, and M. Cresti: Identification and Characterization of a Novel Microtubule-Based Motor Associated with Membranous Organelles in Tobacco Pollen Tubes, 1719–1736

Organogenesis
R. C. O'Malley and D. G. Lynn: Expansin Message Regulation in Parasitic Angiosperms: Marking Time in Development, 1455–1465
D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518

***OsBRI1* gene**
C. Yamamuro, Y. Ihara, X. Wu, T. Noguchi, S. Fujioka, S. Takatsuto, M. Ashikari, H. Kitano, and M. Matsuoka: Loss of Function of a Rice *brassinosteroid insensitive1* Homolog Prevents Internode Elongation and Bending of the Lamina Joint, 1591–1605

***OsMADS1* gene**
J.-S. Jeon, S. Jang, S. Lee, J. Nam, C. Kim, S.-H. Lee, Y.-Y. Chung, S.-R. Kim, Y. H. Lee, Y.-G. Cho, and G. An: *leafy hull sterile1* Is a Homeotic Mutation in a Rice MADS Box Gene Affecting Rice Flower Development, 871–884

Osmotic stress
M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611

Outer membrane
S.-L. Tu and H.-m. Li: Insertion of OEP14 into the Outer Envelope Membrane Is Mediated by Proteinaceous Components of Chloroplasts, 1951–1959

Oxalic acid
S. G. Cessna, V. E. Sears, M. B. Dickman, and P. S. Low: Oxalic Acid, a Pathogenicity Factor for *Sclerotinia sclerotiorum*, Suppresses the Oxidative Burst of the Host Plant, 2191–2199

Oxidative burst
S. G. Cessna, V. E. Sears, M. B. Dickman, and P. S. Low: Oxalic Acid, a Pathogenicity Factor for *Sclerotinia sclerotiorum*, Suppresses the Oxidative Burst of the Host Plant, 2191–2199

Oxidative stress
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
G. Creissen, J. Fermin, M. Fryer, B. Kular, N. Leyland, H. Reynolds, G. Pastori, F. Wellburn, N. Baker, A. Wellburn, and P. Mulineau: Elevated Glutatione Biosynthetic Capacity in the Chloroplasts of Transgenic Tobacco Paradoxically Causes Increased Oxidative Stress: Correction [**11,** 1277–1291], 301
L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione *S*-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950
K. Overmyer, H. Tuominen, R. Kettunen, C. Betz, C. Langebartels, H. Sandermann, Jr., and J. Kangasjärvi: Ozone-Sensitive Arabidopsis *rcd1* Mutant Reveals Opposite Roles for Ethylene and Jasmonate Signaling Pathways in Regulating Superoxide-Dependent Cell Death, 1849–1862
M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646

Ozone
K. Overmyer, H. Tuominen, R. Kettunen, C. Betz, C. Langebartels, H. Sandermann, Jr., and J. Kangasjärvi: Ozone-Sensitive Arabidopsis *rcd1* Mutant Reveals Opposite Roles for Ethylene and Jasmonate Signaling Pathways in Regulating Superoxide-Dependent Cell Death, 1849–1862
M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646

P

***p2* gene**
P. Zhang, S. Chopra, and T. Peterson: A Segmental Gene Duplication Generated Differentially Expressed *myb*-Homologous Genes in Maize, 2311–2322

p53^{WIG} kinase
C. Jonak, D. Beisteiner, J. Beyerly, and H. Hirt: Wound-Induced Expression and Activation of WIG, a Novel Glycogen Synthase Kinase 3, 1467–1475

Papaver rhoeas
A. Geitmann, B. N. Snowman, A. M. C. Emons, and V. E. Franklin-Tong: Alterations in the Actin Cytoskeleton of Pollen Tubes Are Induced by the Self-Incompatibility Reaction in *Papaver rhoeas*, 1239–1251

***pap1-D* mutant**
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393

Paramutation
J. E. Dorweiler, C. C. Carey, K. M. Kubo, J. B. Hollick, J. L. Kermicle, and V. L. Chandler: *mediator of paramutation1* Is Required for Establishment and Maintenance of Paramutation at Multiple Maize Loci, 2101–2118

Parasitic development
R. C. O'Malley and D. G. Lynn: Expansin Message Regulation in Parasitic Angiosperms: Marking Time in Development, 1455–1465

Parsley
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione *S*-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950

Pathogenesis
S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290
D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489
M. Dufresne, S. Perfect, A.-L. Pellier, J. A. Bailey, and T. Langin: A GAL4-like Protein Is Involved in the Switch between Biotrophic and Necrotrophic Phases of the Infection Process of *Colletotrichum lindemuthianum* on Common Bean, 1579–1589
Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785
X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-O-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702
Y.-K. Kim, T. Kawano, D. Li, and P. E. Kolattukudy: A Mitogen-Activated Protein Kinase Kinase Required for Induction of Cytokinesis and Appressorium Formation by Host Signals in the Conidia of *Colletotrichum gloeosporioides*, 1331–1343

J. E. Luck, G. J. Lawrence, P. N. Dodds, K. W. Shepherd, and J. G. Ellis: Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination, 1367–1377
T. Meindl, T. Boller, and G. Felix: The Bacterial Elicitor Flagellin Activates Its Receptor in Tomato Cells According to the Address–Message Concept, 1783–1794
M. R. Morra and I. T. D. Petty: Tissue Specificity of Geminivirus Infection Is Genetically Determined, 2259–2270
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925
J. M. Stone, J. E. Heard, T. Asai, and F. M. Ausubel: Simulation of Fungal-Mediated Cell Death by Fumonisin B1 and Selection of Fumonisin B1–Resistant (*fbr*) Arabidopsis Mutants, 1811–1822
N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247
S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582
T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826

Pathogenesis-related genes
M. Kinkema, W. Fan, and X. Dong: Nuclear Localization of NPR1 Is Required for Activation of *PR* Gene Expression, 2339–2350

PBF-2
D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

***PcGST1* gene**
L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione *S*-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950

Pea
C. W. Gourlay, J. M. I. Hofer, and T. H. N. Ellis: Pea Compound Leaf Architecture Is Regulated by Interactions among the Genes *UNIFOLIATA*, *COCHLEATA*, *AFILA*, and *TENDRILLESS*, 1279–1294
A. Hisada, H. Hanzawa, J. L. Weller, A. Nagatani, J. B. Reid, and M. Furuya: Light-Induced Nuclear Translocation of Endogenous Pea Phytochrome A Visualized by Immunocytochemical Procedures, 1063–1078
T. May and J. Soll: 14-3-3 Proteins Form a Guidance Complex with Chloroplast Precursor Proteins in Plants, 53–63
J.-B. Peltier, G. Friso, D. E. Kalume, P. Roepstorff, F. Nilsson, I. Adamska, and K. J. van Wijk: Proteomics of the Chloroplast: Systematic Identification and Targeting Analysis of Lumenal and Peripheral Thylakoid Proteins, 319–341
H. B. Smith: Proteomics: Broad Strokes of Expressionism? (In This Issue), 303–304
J. A. Sullivan and J. C. Gray: The Pea *light-independent photomorphogenesis1* Mutant Results from Partial Duplication of the *COP1* Generating an Internal Promoter and Producing Two Distinct Transcripts, 1927–1937

Pectin
J.-C. Mollet, S.-Y. Park, E. A. Nothnagel, and E. M. Lord: A Lily Stylar Pectin Is Necessary for Pollen Tube Adhesion to an in Vitro Stylar Matrix, 1737–1749
D. E. Shevell, T. Kunkel, and N.-H. Chua: Cell Wall Alterations in the Arabidopsis *emb30* Mutant, 2047–2059

Peptide transporter
H.-Y. Steiner, W. Song, L. Zhang, F. Naider, J. M. Becker, and G. Stacey: An Arabidopsis Peptide Transporter Is a Member of a New Class of Membrane Transport Proteins: Correction [**6**, 1289–1299], 2295

Peronospora parasitica
E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128

Petals
B. A. Krizek, V. Prost, and A. Macias: *AINTEGUMENTA* Promotes Petal Identity and Acts as a Negative Regulator of *AGAMOUS*, 1357–1366
F. Tooke and N. H. Battey: A Leaf-Derived Signal Is a Quantitative Determinant of Floral Form in Impatiens, 1837–1847

Petunia
C. Spelt, F. Quattrocchio, J. N. M. Mol, and R. Koes: *anthocyanin1* of Petunia Encodes a Basic Helix-Loop-Helix Protein That Directly Activates Transcription of Structural Anthocyanin Genes, 1619–1631

P-glycoproteins
C. Thomas, A. Rajagopal, B. Windsor, R. Dudler, A. Lloyd, and S. J. Roux: A Role for Ectophosphatase in Xenobiotic Resistance, 519–533

pH changes
X. Cao, S. W. Rogers, J. Butler, L. Beevers, and J. C. Rogers: Structural Requirements for Ligand Binding by a Probable Plant Vacuolar Sorting Receptor, 493–506

Phenotypic instability
L. Comai, A. P. Tyagi, K. Winter, R. Holmes-Davis, S. H. Reynolds, Y. Stevens, and B. Byers: Phenotypic Instability and Rapid Gene Silencing in Newly Formed Arabidopsis Allotetraploids, 1551–1567

Phenylpropanoid biosynthesis
J. O. Borevitz, Y. Xia, J. Blount, R. A. Dixon, and C. Lamb: Activation Tagging Identifies a Conserved MYB Regulator of Phenylpropanoid Biosynthesis, 2383–2393

Phloem
B. Lacombe, G. Pilot, E. Michard, F. Gaymard, H. Sentenac, and J.-B. Thibaud: A Shaker-like K^+ Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis, 837–851
A. Weise, L. Barker, C. Kühn, S. Lalonde, H. Buschmann, W. B. Frommer, and J. M. Ward: A New Subfamily of Sucrose Transporters, SUT4, with Low Affinity/High Capacity Localized in Enucleate Sieve Elements of Plants, 1345–1355

Phosphatidylinositol 3-kinase
T. D. Bunney, P. A. C. Watkins, A. F. Beven, P. J. Shaw, L. E. Hernandez, G. P. Lomonossoff, M. Shanks, J. Peart, and B. K. Drøbak: Association of Phosphatidylinositol 3-Kinase with Nuclear Transcription Sites in Higher Plants, 1679–1687
I. Heilmann, J. Stevenson-Paulik, and I. Y. Perera: Plant PtdIns 3-Kinase Goes Nuclear (In This Issue), 1511–1512

Phospholipase D
W. Frank, T. Munnik, K. Kerkmann, F. Salamini, and D. Bartels: Water Deficit Triggers Phospholipase D Activity in the Resurrection Plant *Craterostigma plantagineum*, 111–123
C. Wang, C. A. Zien, M. Afitlhile, R. Welti, D. F. Hildebrand, and X. Wang: Involvement of Phospholipase D in Wound-Induced Accumulation of Jasmonic Acid in Arabidopsis, 2237–2246

Phosphorylation
T. May and J. Soll: 14-3-3 Proteins Form a Guidance Complex with Chloroplast Precursor Proteins in Plants, 53–63
T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815

Photoinduction
A. Hisada, H. Hanzawa, J. L. Weller, A. Nagatani, J. B. Reid, and M. Furuya: Light-Induced Nuclear Translocation of Endogenous Pea Phytochrome A Visualized by Immunocytochemical Procedures, 1063–1078

Photoinhibition
M. Lindahl, C. Spetea, T. Hundal, A. B. Oppenheim, Z. Adam, and B. Andersson: The Thylakoid FtsH Protease Plays a Role in the Light-Induced Turnover of the Photosystem II D1 Protein, 419–431

Photolyase
J. Hidema, T. Kumagai, and B. M. Sutherland: UV Radiation–Sensitive Norin 1 Rice Contains Defective Cyclobutane Pyrimidine Dimer Photolyase, 1569–1578

Photolysis
H. B. Smith: Photoreceptors in Signal Transduction: Pathways of Enlightenment (In This Issue), 1–3

Photomorphogenesis
D. Cao, Y. Lin, and C.-L. Cheng: Genetic Interactions between the Chlorate-Resistant Mutant *cr88* and the Photomorphogenic Mutants *cop1* and *hy5*, 199–210
Photoperiods
N. A. Eckardt: Giving Rice the Time of Day: Molecular Identification of a Major Photoperiod Sensitivity Quantitative Trait Locus (In This Issue), 2299–2301
F. Tooke and N. H. Battey: A Leaf-Derived Signal Is a Quantitative Determinant of Floral Form in Impatiens, 1837–1847
M. Yano, Y. Katayose, M. Ashikari, U. Yamanouchi, L. Monna, T. Fuse, T. Baba, K. Yamamoto, Y. Umehara, Y. Nagamura, and T. Sasaki: *Hd1*, a Major Photoperiod Sensitivity Quantitative Trait Locus in Rice, Is Closely Related to the Arabidopsis Flowering Time Gene *CONSTANS*, 2473–2483
Photoreceptors
T. Imaizumi, T. Kanegae, and M. Wada: Cryptochrome Nucleocytoplasmic Distribution and Gene Expression Are Regulated by Light Quality in the Fern *Adiantum capillus-veneris*, 81–95
H. B. Smith: Photoreceptors in Signal Transduction: Pathways of Enlightenment (In This Issue), 1–3
Photorepair
J. Hidema, T. Kumagai, and B. M. Sutherland: UV Radiation–Sensitive Norin 1 Rice Contains Defective Cyclobutane Pyrimidine Dimer Photolyase, 1569–1578
Photosystem II
M. Lindahl, C. Spetea, T. Hundal, A. B. Oppenheim, Z. Adam, and B. Andersson: The Thylakoid FtsH Protease Plays a Role in the Light-Induced Turnover of the Photosystem II D1 Protein, 419–431
L. Zhang, V. Paakkarinen, K. J. van Wijk, and E.-M. Aro: Biogenesis of the Chloroplast-Encoded D1 Protein: Regulation of Translation Elongation, Insertion, and Assembly into Photosystem II, 1769–1781
Phototropism
T. Sakai, T. Wada, S. Ishiguro, and K. Okada: RPT2: A Signal Transducer of the Phototropic Response in Arabidopsis, 225–236
Phyllotaxis
D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518
Phyllotaxy
J.-I. Itoh, H. Kitano, M. Matsuoka, and Y. Nagato: *SHOOT ORGANIZATION* Genes Regulate Shoot Apical Meristem Organization and the Pattern of Leaf Primordium Initiation in Rice, 2161–2174
Phytoalexins
X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-O-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702
T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826
Phytochrome A
M.-S. Soh, Y.-M. Kim, S.-J. Han, and P.-S. Song: REP1, a Basic Helix-Loop-Helix Protein, Is Required for a Branch Pathway of Phytochrome A Signaling in Arabidopsis, 2061–2073
Phytochromes
C. Büche, C. Poppe, E. Schäfer, and T. Kretsch: *eid1*: A New Arabidopsis Mutant Hypersensitive in Phytochrome A–Dependent High-Irradiance Responses, 547–558
P. D. Cerdán, R. J. Staneloni, J. Ortega, M. M. Bunge, M. J. Rodriguez-Batiller, R. A. Sánchez, and J. J. Casal: Sustained but Not Transient Phytochrome A Signaling Targets a Region of an *Lhcb1*2* Promoter Not Necessary for Phytochrome B Action, 1203–1211
P. F. Devlin and S. A. Kay: Cryptochromes Are Required for Phytochrome Signaling to the Circadian Clock but Not for Rhythmicity, 2499–2509
A. Hisada, H. Hanzawa, J. L. Weller, A. Nagatani, J. B. Reid, and M. Furuya: Light-Induced Nuclear Translocation of Endogenous Pea Phytochrome A Visualized by Immunocytochemical Procedures, 1063–1078
Phytohormones
S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309
Phytophthora sojae
B. Blume, T. Nürnberger, N. Nass, and D. Scheel: Receptor-Mediated Increase in Cytoplasmic Free Calcium Required for Activation of Pathogen Defense in Parsley, 1425–1440
Pieris rapae
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
Pine
J. S. Heslop-Harrison: Comparative Genome Organization in Plants: From Sequence and Markers to Chromatin and Chromosomes, 617–635
***pin-formed1-1* mutant**
D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518
***Pi-ta* gene**
G. T. Bryan, K.-S. Wu, L. Farrall, Y. Jia, H. P. Hershey, S. A. McAdams, K. N. Faulk, G. K. Donaldson, R. Tarchini, and B. Valent: A Single Amino Acid Difference Distinguishes Resistant and Susceptible Alleles of the Rice Blast Resistance Gene *Pi-ta*, 2033–2045
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032
Plasma membrane
W. S. Chung, S. H. Lee, J. C. Kim, W. D. Heo, M. C. Kim, C. Y. Park, H. C. Park, C. O. Lim, W. B. Kim, J. F. Harper, and M. J. Cho: Identification of a Calmodulin-Regulated Soybean Ca^{2+}-ATPase (SCA1) That Is Located in the Plasma Membrane, 1393–1407
L. Shan, V. K. Thara, G. B. Martin, J.-M. Zhou, and X. Tang: The Pseudomonas AvrPto Protein Is Differentially Recognized by Tomato and Tobacco and Is Localized to the Plant Plasma Membrane, 2323–2337
R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546
Plastids
A. B. Cahoon and M. P. Timko: *yellow-in-the-dark* Mutants of Chlamydomonas Lack the CHLL Subunit of Light-Independent Protochlorophyllide Reductase, 559–568
A. Rohde, R. De Rycke, T. Beeckman, G. Engler, M. Van Montagu, and W. Boerjan: ABI3 Affects Plastid Differentiation in Dark-Grown Arabidopsis Seedlings, 35–52
A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801
Plastochron
J.-I. Itoh, H. Kitano, M. Matsuoka, and Y. Nagato: *SHOOT ORGANIZATION* Genes Regulate Shoot Apical Meristem Organization and the Pattern of Leaf Primordium Initiation in Rice, 2161–2174
***pma4* gene**
R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546
Poaceae
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539
Pollen
V. E. Franklin-Tong and F. C. H. Franklin: Self-Incompatibility in Brassica: The Elusive Pollen *S* Gene Is Identified! (Insight), 305–308

R. Vinkenoog, M. Spielman, S. Adams, R. L. Fischer, H. G. Dickinson, and R. J. Scott: Hypomethylation Promotes Autonomous Endosperm Development and Rescues Postfertilization Lethality in *fie* Mutants, 2271–2282

Pollen coats

A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008

Pollen tubes

G. Cai, S. Romagnoli, A. Moscatelli, E. Ovidi, G. Gambellini, A. Tiezzi, and M. Cresti: Identification and Characterization of a Novel Microtubule-Based Motor Associated with Membranous Organelles in Tobacco Pollen Tubes, 1719–1736

A. Geitmann, B. N. Snowman, A. M. C. Emons, and V. E. Franklin-Tong: Alterations in the Actin Cytoskeleton of Pollen Tubes Are Induced by the Self-Incompatibility Reaction in *Papaver rhoeas*, 1239–1251

I. B. Heath and A. Geitmann: Cell Biology of Plant and Fungal Tip Growth, Getting to the Point (Meeting Report), 1513–1517. Correction, 2295

J.-C. Mollet, S.-Y. Park, E. A. Nothnagel, and E. M. Lord: A Lily Stylar Pectin Is Necessary for Pollen Tube Adhesion to an in Vitro Stylar Matrix, 1737–1749

S.-Y. Park, G.-Y. Jauh, J.-C. Mollet, K. J. Eckard, E. A. Nothnagel, L. L. Walling, and E. M. Lord: A Lipid Transfer–like Protein Is Necessary for Lily Pollen Tube Adhesion to an in Vitro Stylar Matrix, 151–163

Polycomb proteins

R. Yadegari, T. Kinoshita, O. Lotan, G. Cohen, A. Katz, Y. Choi, A. Katz, K. Nakashima, J. J. Harada, R. B. Goldberg, R. L. Fischer, and N. Ohad: Mutations in the *FIE* and *MEA* Genes That Encode Interacting Polycomb Proteins Cause Parent-of-Origin Effects on Seed Development by Distinct Mechanisms, 2367–2381

Polyploidy

A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

Postembryonic development

D. E. Fernandez, G. R. Heck, S. E. Perry, S. E. Patterson, A. B. Bleecker, and S.-C. Fang: The Embryo MADS Domain Factor AGL15 Acts Postembryonically: Inhibition of Perianth Senescence and Abscission via Constitutive Expression, 183–197

Post-transcriptional gene silencing

T. Dalmay, A. Hamilton, E. Mueller, and D. C. Baulcombe: *Potato Virus X* Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing, 369–379

Potassium

B. Lacombe, G. Pilot, E. Michard, F. Gaymard, H. Sentenac, and J.-B. Thibaud: A Shaker-like K^+ Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis, 837–851

Potato

L. Barker, C. Kühn, A. Weise, A. Schulz, C. Gebhardt, B. Hirner, H. Hellmann, W. Schulze, J. M. Ward, and W. B. Frommer: SUT2, a Putative Sucrose Sensor in Sieve Elements, 1153–1164

D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801

A. Weise, L. Barker, C. Kühn, S. Lalonde, H. Buschmann, W. B. Frommer, and J. M. Ward: A New Subfamily of Sucrose Transporters, SUT4, with Low Affinity/High Capacity Localized in Enucleate Sieve Elements of Plants, 1345–1355

Potato virus X

R. A. Burton, D. M. Gibeaut, A. Bacic, K. Findlay, K. Roberts, A. Hamilton, D. C. Baulcombe, and G. B. Fincher: Virus-Induced Silencing of a Plant Cellulose Synthase Gene, 691–705

T. Dalmay, A. Hamilton, E. Mueller, and D. C. Baulcombe: *Potato Virus X* Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing, 369–379

***PR-10a* gene**

D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

***PROCUSTE1* gene**

M. Fagard, T. Desnos, T. Desprez, F. Goubet, G. Refregier, G. Mouille, M. McCann, C. Rayon, S. Vernhettes, and H. Höfte: *PROCUSTE1* Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis, 2409–2423

Profilins

D. R. Kovar, B. K. Drøbak, and C. J. Staiger: Maize Profilin Isoforms Are Functionally Distinct, 583–598

Programmed cell death

T. Asai, J. M. Stone, J. E. Heard, Y. Kovtun, P. Yorgey, J. Sheen, and F. M. Ausubel: Fumonisin B1–Induced Cell Death in Arabidopsis Protoplasts Requires Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways, 1823–1835

J. M. Stone, J. E. Heard, T. Asai, and F. M. Ausubel: Simulation of Fungal-Mediated Cell Death by Fumonisin B1 and Selection of Fumonisin B1–Resistant (*fbr*) Arabidopsis Mutants, 1811–1822

P. Xu and M. J. Roossinck: Cucumber Mosaic Virus D Satellite RNA–Induced Programmed Cell Death in Tomato, 1079–1092

Protein backbones

C. J. Schultz, K. L. Johnson, G. Currie, and A. Bacic: The Classical Arabinogalactan Protein Gene Family of Arabidopsis, 1751–1767

Protein binding

T. Meindl, T. Boller, and G. Felix: The Bacterial Elicitor Flagellin Activates Its Receptor in Tomato Cells According to the Address–Message Concept, 1783–1794

Protein export

V. Gomord and L. Faye: Reply: Glycobiology and the Plant Cell—A World of Information (Letter To The Editor), 1519–1521

P. Pimpl and J. Denecke: ER Retention of Soluble Proteins: Retrieval, Retention, or Both? (Letter To The Editor), 1517–1519

Protein import

T. May and J. Soll: 14-3-3 Proteins Form a Guidance Complex with Chloroplast Precursor Proteins in Plants, 53–63

S.-L. Tu and H.-m. Li: Insertion of OEP14 into the Outer Envelope Membrane Is Mediated by Proteinaceous Components of Chloroplasts, 1951–1959

Protein kinases

M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611

E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718

Protein synthesis

L. Zhang, V. Paakkarinen, K. J. van Wijk, and E.-M. Aro: Biogenesis of the Chloroplast-Encoded D1 Protein: Regulation of Translation Elongation, Insertion, and Assembly into Photosystem II, 1769–1781

Protein transport

S. Pagny, M. Cabanes-Macheteau, J. W. Gillikin, N. Leborgne-Castel, P. Lerouge, R. S. Boston, L. Faye, and V. Gomord: Protein Recycling from the Golgi Apparatus to the Endoplasmic Reticulum in Plants and Its Minor Contribution to Calreticulin Retention, 739–755

14-3-3 Proteins

T. May and J. Soll: 14-3-3 Proteins Form a Guidance Complex with Chloroplast Precursor Proteins in Plants, 53–63

Proteolysis

M. Lindahl, C. Spetea, T. Hundal, A. B. Oppenheim, Z. Adam, and B. Andersson: The Thylakoid FtsH Protease Plays a Role in the Light-Induced Turnover of the Photosystem II D1 Protein, 419–431

W. Majeran, F.-A. Wollman, and O. Vallon: Evidence for a Role of ClpP in the Degradation of the Chloroplast Cytochrome b_6f Complex, 137–149

Proteomics

J.-B. Peltier, G. Friso, D. E. Kalume, P. Roepstorff, F. Nilsson, I. Adamska, and K. J. van Wijk: Proteomics of the Chloroplast: Systematic Identification and Targeting Analysis of Lumenal and Peripheral Thylakoid Proteins, 319–341

H. B. Smith: Proteomics: Broad Strokes of Expressionism? (In This Issue), 303–304

Protochlorophyllide reductase

A. B. Cahoon and M. P. Timko: *yellow-in-the-dark* Mutants of Chlamydomonas Lack the CHLL Subunit of Light-Independent Protochlorophyllide Reductase, 559–568

Pseudomonas syringae

Y. Tao, F. Yuan, R. T. Leister, F. M. Ausubel, and F. Katagiri: Mutational Analysis of the Arabidopsis Nucleotide Binding Site–Leucine-Rich Repeat Resistance Gene *RPS2*, 2541–2554

Pseudomonas syringae* pv *maculicola

E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128

Pseudomonas syringae* pv *tomato

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

L. Shan, V. K. Thara, G. B. Martin, J.-M. Zhou, and X. Tang: The Pseudomonas AvrPto Protein Is Differentially Recognized by Tomato and Tobacco and Is Localized to the Plant Plasma Membrane, 2323–2337

***Pti4* gene**

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

Pto kinase

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

Purine permease1

B. Gillissen, L. Bürkle, B. André, C. Kühn, D. Rentsch, B. Brandl, and W. B. Frommer: A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis, 291–300

Pyricularia oryzae

T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826

Q

Quantitative trait loci

N. A. Eckardt: Giving Rice the Time of Day: Molecular Identification of a Major Photoperiod Sensitivity Quantitative Trait Locus (In This Issue), 2299–2301

A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

R

Rab GTPase

H. Batoko, H.-Q. Zheng, C. Hawes, and I. Moore: A Rab1 GTPase Is Required for Transport between the Endoplasmic Reticulum and Golgi Apparatus and for Normal Golgi Movement in Plants, 2201–2217

N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011

Radial patterning

J. Lim, Y. Helariutta, C. D. Specht, J. Jung, L. Sims, W. B. Bruce, S. Diehn, and P. N. Benfey: Molecular Analysis of the *SCARECROW* Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems, 1307–1318

***radical-induced cell death1* mutant**

K. Overmyer, H. Tuominen, R. Kettunen, C. Betz, C. Langebartels, H. Sandermann, Jr., and J. Kangasjärvi: Ozone-Sensitive Arabidopsis *rcd1* Mutant Reveals Opposite Roles for Ethylene and Jasmonate Signaling Pathways in Regulating Superoxide-Dependent Cell Death, 1849–1862

Receptor activation

T. Meindl, T. Boller, and G. Felix: The Bacterial Elicitor Flagellin Activates Its Receptor in Tomato Cells According to the Address–Message Concept, 1783–1794

Recombination

A. L. Casselman, J. Vrebalov, J. A. Conner, A. Singhal, J. Giovannoni, M. E. Nasrallah, and J. B. Nasrallah: Determining the Physical Limits of the Brassica *S* Locus by Recombinational Analysis, 23–33

***reduced phytochrome signaling 1* mutants**

M.-S. Soh, Y.-M. Kim, S.-J. Han, and P.-S. Song: REP1, a Basic Helix-Loop-Helix Protein, Is Required for a Branch Pathway of Phytochrome A Signaling in Arabidopsis, 2061–2073

***reduced sensitivity to far-red light* mutant**

J. I. Spiegelman, M. N. Mindrinos, C. Fankhauser, D. Richards, J. Lutes, J. Chory, and P. J. Oefner: Cloning of the Arabidopsis *RSF1* Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography, 2485–2498

Reporter genes

P. S. Springer: Gene Traps: Tools for Plant Development and Genomics, 1007–1020

REPRESSION OF SHOOT GROWTH

J. Fukazawa, T. Sakai, S. Ishida, I. Yamaguchi, Y. Kamiya, and Y. Takahashi: REPRESSION OF SHOOT GROWTH, a bZIP Transcriptional Activator, Regulates Cell Elongation by Controlling the Level of Gibberellins, 901–915

Research policies

N. A. Eckardt: Sequencing the Rice Genome (Meeting Report), 2013–2017

Resistance

M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676

W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977

X.-Z. He and R. A. Dixon: Genetic Manipulation of Isoflavone 7-*O*-Methyltransferase Enhances Biosynthesis of 4′-O-Methylated Isoflavonoid Phytoalexins and Disease Resistance in Alfalfa, 1689–1702

C.-F. Hwang, A. V. Bhakta, G. M. Truesdell, W. M. Pudlo, and V. M. Williamson: Evidence for a Role of the N Terminus and Leucine-Rich Repeat Region of the *Mi* Gene Product in Regulation of Localized Cell Death, 1319–1329

P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690

J. E. Luck, G. J. Lawrence, P. N. Dodds, K. W. Shepherd, and J. G. Ellis: Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination, 1367–1377

E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128

T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925

T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815

L. Shan, V. K. Thara, G. B. Martin, J.-M. Zhou, and X. Tang: The Pseudomonas AvrPto Protein Is Differentially Recognized by

Tomato and Tobacco and Is Localized to the Plant Plasma Membrane, 2323–2337
C. Thomas, A. Rajagopal, B. Windsor, R. Dudler, A. Lloyd, and S. J. Roux: A Role for Ectophosphatase in Xenobiotic Resistance, 519–533

Resistance genes
G. T. Bryan, K.-S. Wu, L. Farrall, Y. Jia, H. P. Hershey, S. A. McAdams, K. N. Faulk, G. K. Donaldson, R. Tarchini, and B. Valent: A Single Amino Acid Difference Distinguishes Resistant and Susceptible Alleles of the Rice Blast Resistance Gene *Pi-ta*, 2033–2045
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032
Y. Tao, F. Yuan, R. T. Leister, F. M. Ausubel, and F. Katagiri: Mutational Analysis of the Arabidopsis Nucleotide Binding Site–Leucine-Rich Repeat Resistance Gene *RPS2*, 2541–2554

Resistance mutants
J. D. Clarke, S. M. Volko, H. Ledford, F. M. Ausubel, and X. Dong: Roles of Salicylic Acid, Jasmonic Acid, and Ethylene in *cpr*-Induced Resistance in Arabidopsis, 2175–2190

***responsive to antagonist1* mutant**
K. E. Woeste and J. J. Kieber: A Strong Loss-of-Function Mutation in *RAN1* Results in Constitutive Activation of the Ethylene Response Pathway as Well as a Rosette-Lethal Phenotype, 443–455

Retrotransposons
H. Hirochika, H. Okamoto, and T. Kakutani: Silencing of Retrotransposons in Arabidopsis and Reactivation by the *ddm1* Mutation, 357–368
K. Sugimoto, S. Takeda, and H. Hirochika: MYB-Related Transcription Factor NtMYB2 Induced by Wounding and Elicitors is a Regulator of the Tobacco Retrotransposon *Tto1* and Defense-Related Genes, 2511–2527

***REVOLUTA* gene**
O. J. Ratcliffe, J. L. Riechmann, and J. Z. Zhang: *INTERFASCICULAR FIBERLESS1* Is the Same Gene as *REVOLUTA* (Letters To The Editor), 315–317

Ribonucleotide reductase
M.-E. Chabouté, B. Clément, M. Sekine, G. Philipps, and N. Chaubet-Gigot: Cell Cycle Regulation of the Tobacco Ribonucleotide Reductase Small Subunit Gene Is Mediated by E2F-like Elements, 1987–1999

Rice
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646
N. A. Eckardt: Giving Rice the Time of Day: Molecular Identification of a Major Photoperiod Sensitivity Quantitative Trait Locus (In This Issue), 2299–2301
N. A. Eckardt: Sequencing the Rice Genome (Meeting Report), 2013–2017
J. Hidema, T. Kumagai, and B. M. Sutherland: UV Radiation–Sensitive Norin 1 Rice Contains Defective Cyclobutane Pyrimidine Dimer Photolyase, 1569–1578
J.-I. Itoh, H. Kitano, M. Matsuoka, and Y. Nagato: *SHOOT ORGANIZATION* Genes Regulate Shoot Apical Meristem Organization and the Pattern of Leaf Primordium Initiation in Rice, 2161–2174
J.-S. Jeon, S. Jang, S. Lee, J. Nam, C. Kim, S.-H. Lee, Y.-Y. Chung, S.-R. Kim, Y. H. Lee, Y.-G. Cho, and G. An: *leafy hull sterile1* Is a Homeotic Mutation in a Rice MADS Box Gene Affecting Rice Flower Development, 871–884
N. V. Raikhel, M. Nishimura, R. S. Quatrano, S. H. Howell, W. Davies, and D. Bowles: The Free Flow of Ideas, Information, and Materials (Editorial), 2297
R. Tarchini, P. Biddle, R. Wineland, S. Tingey, and A. Rafalski: The Complete Sequence of 340 kb of DNA around the Rice *Adh1–Adh2* Region Reveals Interrupted Colinearity with Maize Chromosome 4, 381–391
T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826
C. Yamamuro, Y. Ihara, X. Wu, T. Noguchi, S. Fujioka, S. Takatsuto, M. Ashikari, H. Kitano, and M. Matsuoka: Loss of Function of a Rice *brassinosteroid insensitive1* Homolog Prevents Internode Elongation and Bending of the Lamina Joint, 1591–1605
M. Yano, Y. Katayose, M. Ashikari, U. Yamanouchi, L. Monna, T. Fuse, T. Baba, K. Yamamoto, Y. Umehara, Y. Nagamura, and T. Sasaki: *Hd1*, a Major Photoperiod Sensitivity Quantitative Trait Locus in Rice, Is Closely Related to the Arabidopsis Flowering Time Gene *CONSTANS*, 2473–2483

Rice blast disease
G. T. Bryan, K.-S. Wu, L. Farrall, Y. Jia, H. P. Hershey, S. A. McAdams, K. N. Faulk, G. K. Donaldson, R. Tarchini, and B. Valent: A Single Amino Acid Difference Distinguishes Resistant and Susceptible Alleles of the Rice Blast Resistance Gene *Pi-ta*, 2033–2045
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032

RNA profiling
A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661
W. Bruce, O. Folkerts, C. Garnaat, O. Crasta, B. Roth, and B. Bowen: Expression Profiling of the Maize Flavonoid Pathway Genes Controlled by Estradiol-Inducible Transcription Factors CRC and P, 65–79
W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977
S. L. Harmer and S. A. Kay: Microarrays: Determining the Balance of Cellular Transcription (In This Issue), 613–615
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
R. Wang, K. Guegler, S. T. LaBrie, and N. M. Crawford: Genomic Analysis of a Nutrient Response in Arabidopsis Reveals Diverse Expression Patterns and Novel Metabolic and Potential Regulatory Genes Induced by Nitrate, 1491–1509

Root development
N. Beaudoin, C. Serizet, F. Gosti, and J. Giraudat: Interactions between Abscisic Acid and Ethylene Signaling Cascades, 1103–1115
G. Blanc, A. Barakat, R. Guyot, R. Cooke, and M. Delseny: Extensive Duplication and Reshuffling in the Arabidopsis Genome, 1093–1101
M. Fagard, T. Desnos, T. Desprez, F. Goubet, G. Refregier, G. Mouille, M. McCann, C. Rayon, S. Vernhettes, and H. Höfte: *PROCUSTE1* Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis, 2409–2423
M. Ghassemian, E. Nambara, S. Cutler, H. Kawaide, Y. Kamiya, and P. McCourt: Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in Arabidopsis, 1117–1126
J. Lim, Y. Helariutta, C. D. Specht, J. Jung, L. Sims, W. B. Bruce, S. Diehn, and P. N. Benfey: Molecular Analysis of the *SCARECROW* Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems, 1307–1318
T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu, D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109

Root hairs
J. S. Parker, A. C. Cavell, L. Dolan, K. Roberts, and C. S. Grierson: Genetic Interactions during Root Hair Morphogenesis in Arabidopsis, 1961–1974

***ROOT MERISTEMLESS1* gene**
T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu,

THE PAPER AND INK USED IN THE ORIGINAL PUBLICATION MAY AFFECT THE QUALITY OF THE MICROFORM EDITION.

D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109

***root phototropism2* mutant**

T. Sakai, T. Wada, S. Ishiguro, and K. Okada: RPT2: A Signal Transducer of the Phototropic Response in Arabidopsis, 225–236

Roots

K. Vissenberg, I. M. Martinez-Vilchez, J.-P. Verbelen, J. G. Miller, and S. C. Fry: In Vivo Colocalization of Xyloglucan Endotransglycosylase Activity and Its Donor Substrate in the Elongation Zone of Arabidopsis Roots, 1229–1237

***RPP* genes**

M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676

***RPS2* gene**

Y. Tao, F. Yuan, R. T. Leister, F. M. Ausubel, and F. Katagiri: Mutational Analysis of the Arabidopsis Nucleotide Binding Site–Leucine-Rich Repeat Resistance Gene *RPS2*, 2541–2554

***RRT* gene**

P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690

***RTM* genes**

S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582

S

***S* genes**

D. Charlesworth: How Can Two-Gene Models of Self-Incompatibility Generate New Specificities? (Letters To The Editor), 309–310

V. E. Franklin-Tong and F. C. H. Franklin: Self-Incompatibility in Brassica: The Elusive Pollen *S* Gene Is Identified! (Insight), 305–308

D. P. Matton, D. T. Luu, D. Morse, and M. Cappadocia: Reply: Establishing a Paradigm for the Generation of New *S* Alleles (Letters To The Editor), 313–315

M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312

***S* locus**

A. L. Casselman, J. Vrebalov, J. A. Conner, A. Singhal, J. Giovannoni, M. E. Nasrallah, and J. B. Nasrallah: Determining the Physical Limits of the Brassica *S* Locus by Recombinational Analysis, 23–33

***S* locus cysteine rich protein**

V. E. Franklin-Tong and F. C. H. Franklin: Self-Incompatibility in Brassica: The Elusive Pollen *S* Gene Is Identified! (Insight), 305–308

***SAAT* gene**

A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661

Salicylic acid

T. Asai, J. M. Stone, J. E. Heard, Y. Kovtun, P. Yorgey, J. Sheen, and F. M. Ausubel: Fumonisin B1–Induced Cell Death in Arabidopsis Protoplasts Requires Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways, 1823–1835

J. D. Clarke, S. M. Volko, H. Ledford, F. M. Ausubel, and X. Dong: Roles of Salicylic Acid, Jasmonic Acid, and Ethylene in *cpr*-Induced Resistance in Arabidopsis, 2175–2190

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690

E. Mayda, B. Mauch-Mani, and P. Vera: Arabidopsis *dth9* Mutation Identifies a Gene Involved in Regulating Disease Susceptibility without Affecting Salicylic Acid–Dependent Responses, 2119–2128

M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611

M. V. Rao, H.-i. Lee, R. A. Creelman, J. E. Mullet, and K. R. Davis: Jasmonic Acid Signaling Modulates Ozone-Induced Hypersensitive Cell Death, 1633–1646

Salt stress

W. S. Chung, S. H. Lee, J. C. Kim, W. D. Heo, M. C. Kim, C. Y. Park, H. C. Park, C. O. Lim, W. B. Kim, J. F. Harper, and M. J. Cho: Identification of a Calmodulin-Regulated Soybean Ca^{2+}-ATPase (SCA1) That Is Located in the Plasma Membrane, 1393–1407

S. Kiegerl, F. Cardinale, C. Siligan, A. Gross, E. Baudouin, A. Liwosz, S. Eklöf, S. Till, L. Bögre, H. Hirt, and I. Meskiene: SIMKK, a Mitogen-Activated Protein Kinase (MAPK) Kinase, Is a Specific Activator of the Salt Stress–Induced MAPK, SIMK, 2247–2258

M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611

Salt tolerance

M. Ishitani, J. Liu, U. Halfter, C.-S. Kim, W. Shi, and J.-K. Zhu: SOS3 Function in Plant Salt Tolerance Requires N-Myristoylation and Calcium Binding, 1667–1677

***SCA1* gene**

W. S. Chung, S. H. Lee, J. C. Kim, W. D. Heo, M. C. Kim, C. Y. Park, H. C. Park, C. O. Lim, W. B. Kim, J. F. Harper, and M. J. Cho: Identification of a Calmodulin-Regulated Soybean Ca^{2+}-ATPase (SCA1) That Is Located in the Plasma Membrane, 1393–1407

***SCARECROW* gene**

J. Lim, Y. Helariutta, C. D. Specht, J. Jung, L. Sims, W. B. Bruce, S. Diehn, and P. N. Benfey: Molecular Analysis of the *SCARECROW* Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems, 1307–1318

Scientific research

N. V. Raikhel, M. Nishimura, R. S. Quatrano, S. H. Howell, W. Davies, and D. Bowles: The Free Flow of Ideas, Information, and Materials (Editorial), 2297

Sclerotinia sclerotiorum

S. G. Cessna, V. E. Sears, M. B. Dickman, and P. S. Low: Oxalic Acid, a Pathogenicity Factor for *Sclerotinia sclerotiorum*, Suppresses the Oxidative Burst of the Host Plant, 2191–2199

***Se1* gene**

M. Yano, Y. Katayose, M. Ashikari, U. Yamanouchi, L. Monna, T. Fuse, T. Baba, K. Yamamoto, Y. Umehara, Y. Nagamura, and T. Sasaki: *Hd1*, a Major Photoperiod Sensitivity Quantitative Trait Locus in Rice, Is Closely Related to the Arabidopsis Flowering Time Gene *CONSTANS*, 2473–2483

Secondary metabolism

C. Lehfeldt, A. M. Shirley, K. Meyer, M. O. Ruegger, J. C. Cusumano, P. V. Viitanen, D. Strack, and C. Chapple: Cloning of the *SNG1* Gene of Arabidopsis Reveals a Role for a Serine Carboxypeptidase-like Protein as an Acyltransferase in Secondary Metabolism, 1295–1306

J. C. Steffens: Acyltransferases in Protease's Clothing (In This Issue), 1253–1255

Secretory pathway

N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011

J.-U. Sutter, U. Homann, and G. Thiel: Ca^{2+}-Stimulated Exocytosis in Maize Coleoptile Cells, 1127–1136

Seed development

J. McElver, D. Patton, M. Rumbaugh, C.-m. Liu, L. J. Yang, and D. Meinke: The *TITAN5* Gene of Arabidopsis Encodes a Protein

Related to the ADP Ribosylation Factor Family of GTP Binding Proteins, 1379–1392
A. Rohde, R. De Rycke, T. Beeckman, G. Engler, M. Van Montagu, and W. Boerjan: ABI3 Affects Plastid Differentiation in Dark-Grown Arabidopsis Seedlings, 35–52
R. Yadegari, T. Kinoshita, O. Lotan, G. Cohen, A. Katz, Y. Choi, A. Katz, K. Nakashima, J. J. Harada, R. B. Goldberg, R. L. Fischer, and N. Ohad: Mutations in the *FIE* and *MEA* Genes That Encode Interacting Polycomb Proteins Cause Parent-of-Origin Effects on Seed Development by Distinct Mechanisms, 2367–2381

Seed germination
N. Beaudoin, C. Serizet, F. Gosti, and J. Giraudat: Interactions between Abscisic Acid and Ethylene Signaling Cascades, 1103–1115
G. Blanc, A. Barakat, R. Guyot, R. Cooke, and M. Delseny: Extensive Duplication and Reshuffling in the Arabidopsis Genome, 1093–1101
M. Ghassemian, E. Nambara, S. Cutler, H. Kawaide, Y. Kamiya, and P. McCourt: Regulation of Abscisic Acid Signaling by the Ethylene Response Pathway in Arabidopsis, 1117–1126

Seeds
N. V. Raikhel, M. Nishimura, R. S. Quatrano, S. H. Howell, W. Davies, and D. Bowles: The Free Flow of Ideas, Information, and Materials (Editorial), 2297

Self-incompatibility
A. L. Casselman, J. Vrebalov, J. A. Conner, A. Singhal, J. Giovannoni, M. E. Nasrallah, and J. B. Nasrallah: Determining the Physical Limits of the Brassica *S* Locus by Recombinational Analysis, 23–33
D. Charlesworth: How Can Two-Gene Models of Self-Incompatibility Generate New Specificities? (Letters To The Editor), 309–310
V. E. Franklin-Tong and F. C. H. Franklin: Self-Incompatibility in Brassica: The Elusive Pollen *S* Gene Is Identified! (Insight), 305–308
A. Geitmann, B. N. Snowman, A. M. C. Emons, and V. E. Franklin-Tong: Alterations in the Actin Cytoskeleton of Pollen Tubes Are Induced by the Self-Incompatibility Reaction in *Papaver rhoeas*, 1239–1251
D. P. Matton, D. T. Luu, D. Morse, and M. Cappadocia: Reply: Establishing a Paradigm for the Generation of New *S* Alleles (Letters To The Editor), 313–315
M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312

Senescence
S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309
D. E. Fernandez, G. R. Heck, S. E. Perry, S. E. Patterson, A. B. Bleecker, and S.-C. Fang: The Embryo MADS Domain Factor AGL15 Acts Postembryonically: Inhibition of Perianth Senescence and Abscission via Constitutive Expression, 183–197

Serine carboxypeptidases
C. Lehfeldt, A. M. Shirley, K. Meyer, M. O. Ruegger, J. C. Cusumano, P. V. Viitanen, D. Strack, and C. Chapple: Cloning of the *SNG1* Gene of Arabidopsis Reveals a Role for a Serine Carboxypeptidase-like Protein as an Acyltransferase in Secondary Metabolism, 1295–1306
J. C. Steffens: Acyltransferases in Protease's Clothing (In This Issue), 1253–1255

Serine/threonine kinase 1
M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611

Sesquiterpene biosynthesis
R. S. van der Hoeven, A. J. Monforte, D. Breeden, S. D. Tanksley, and J. C. Steffens: Genetic Control and Evolution of Sesquiterpene Biosynthesis in *Lycopersicon esculentum* and *L. hirsutum*, 2283–2294

***SHAVEN* genes**
J. S. Parker, A. C. Cavell, L. Dolan, K. Roberts, and C. S. Grierson: Genetic Interactions during Root Hair Morphogenesis in Arabidopsis, 1961–1974

Shoot apical meristems
J.-I. Itoh, H. Kitano, M. Matsuoka, and Y. Nagato: *SHOOT ORGANIZATION* Genes Regulate Shoot Apical Meristem Organization and the Pattern of Leaf Primordium Initiation in Rice, 2161–2174
H. Yu, S. H. Yang, and C. J. Goh: *DOH1*, a Class 1 *knox* Gene, Is Required for Maintenance of the Basic Plant Architecture and Floral Transition in Orchid, 2143–2159

***SHOOT ORGANIZATION* genes**
J.-I. Itoh, H. Kitano, M. Matsuoka, and Y. Nagato: *SHOOT ORGANIZATION* Genes Regulate Shoot Apical Meristem Organization and the Pattern of Leaf Primordium Initiation in Rice, 2161–2174

Sieve elements
L. Barker, C. Kühn, A. Weise, A. Schulz, C. Gebhardt, B. Hirner, H. Hellmann, W. Schulze, J. M. Ward, and W. B. Frommer: SUT2, a Putative Sucrose Sensor in Sieve Elements, 1153–1164
A. Weise, L. Barker, C. Kühn, S. Lalonde, H. Buschmann, W. B. Frommer, and J. M. Ward: A New Subfamily of Sucrose Transporters, SUT4, with Low Affinity/High Capacity Localized in Enucleate Sieve Elements of Plants, 1345–1355

Signal transduction
S. Abel, M. Blázquez, J. Dangl, X. W. Deng, I. Graham, J. Harada, J. Jones, and O. Nilsson: Arabidopsis Research 2000 (Meeting Report), 2302–2309
R. Catoira, C. Galera, F. de Billy, R. V. Penmetsa, E.-P. Journet, F. Maillet, C. Rosenberg, D. Cook, C. Gough, and J. Dénarié: Four Genes of *Medicago truncatula* Controlling Components of a Nod Factor Transduction Pathway, 1647–1665
L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione *S*-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950
H. B. Smith: Photoreceptors in Signal Transduction: Pathways of Enlightenment (In This Issue), 1–3
H. B. Smith: Signal Transduction in Systemic Acquired Resistance (In This Issue), 179–181

Silverleaf whitefly
W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423

***Sinapoylglucose accumulator 1* gene**
C. Lehfeldt, A. M. Shirley, K. Meyer, M. O. Ruegger, J. C. Cusumano, P. V. Viitanen, D. Strack, and C. Chapple: Cloning of the *SNG1* Gene of Arabidopsis Reveals a Role for a Serine Carboxypeptidase-like Protein as an Acyltransferase in Secondary Metabolism, 1295–1306

Single-stranded DNA binding factor
D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

Skotomorphogenesis
C. Yamamuro, Y. Ihara, X. Wu, T. Noguchi, S. Fujioka, S. Takatsuto, M. Ashikari, H. Kitano, and M. Matsuoka: Loss of Function of a Rice *brassinosteroid insensitive1* Homolog Prevents Internode Elongation and Bending of the Lamina Joint, 1591–1605

***SLW* genes**
W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423

Snapdragon
N. Dudareva, L. M. Murfitt, C. J. Mann, N. Gorenstein, N. Kolosova, C. M. Kish, C. Bonham, and K. Wood: Developmental Regulation of Methyl Benzoate Biosynthesis and Emission in Snapdragon Flowers, 949–961

***SNF1* gene**
N. J. Tonukari, J. S. Scott-Craig, and J. D. Walton: The *Cochliobolus carbonum SNF1* Gene Is Required for Cell Wall–Degrading Enzyme Expression and Virulence on Maize, 237–247

***soc1* gene**
H. Onouchi, M. I. Igeño, C. Périlleux, K. Graves, and G. Coupland: Mutagenesis of Plants Overexpressing *CONSTANS* Demonstrates Novel Interactions among Arabidopsis Flowering-Time Genes, 885–900

Solanaceae
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

Solanum chacoense
D. Charlesworth: How Can Two-Gene Models of Self-Incompatibility Generate New Specificities? (Letters To The Editor), 309–310
M. K. Uyenoyama and E. Newbigin: Evolutionary Dynamics of Dual-Specificity Self-Incompatibility Alleles (Letters To The Editor), 310–312

Somatic cytokinesis
G. Jürgens: Cytokinesis: The Art of Partitioning (In This Issue), 827–829

Sorghum
A. P. Tikhonov, J. L. Bennetzen, and Z. V. Avramova: Structural Domains and Matrix Attachment Regions along Colinear Chromosomal Segments of Maize and Sorghum, 249–264

***SOS3* gene**
M. Ishitani, J. Liu, U. Halfter, C.-S. Kim, W. Shi, and J.-K. Zhu: SOS3 Function in Plant Salt Tolerance Requires N-Myristoylation and Calcium Binding, 1667–1677

Soybean
T. D. Bunney, P. A. C. Watkins, A. F. Beven, P. J. Shaw, L. E. Hernandez, G. P. Lomonossoff, M. Shanks, J. Peart, and B. K. Drøbak: Association of Phosphatidylinositol 3-Kinase with Nuclear Transcription Sites in Higher Plants, 1679–1687
S. G. Cessna, V. E. Sears, M. B. Dickman, and P. S. Low: Oxalic Acid, a Pathogenicity Factor for *Sclerotinia sclerotiorum*, Suppresses the Oxidative Burst of the Host Plant, 2191–2199
W. S. Chung, S. H. Lee, J. C. Kim, W. D. Heo, M. C. Kim, C. Y. Park, H. C. Park, C. O. Lim, W. B. Kim, J. F. Harper, and M. J. Cho: Identification of a Calmodulin-Regulated Soybean Ca^{2+}-ATPase (SCA1) That Is Located in the Plasma Membrane, 1393–1407
I. Heilmann, J. Stevenson-Paulik, and I. Y. Perera: Plant PtdIns 3-Kinase Goes Nuclear (In This Issue), 1511–1512
T. Yamaguchi, A. Yamada, N. Hong, T. Ogawa, T. Ishii, and N. Shibuya: Differences in the Recognition of Glucan Elicitor Signals between Rice and Soybean: β-Glucan Fragments from the Rice Blast Disease Fungus *Pyricularia oryzae* That Elicit Phytoalexin Biosynthesis in Suspension-Cultured Rice Cells, 817–826

Spinach
A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801

Spore germination
T. Imaizumi, T. Kanegae, and M. Wada: Cryptochrome Nucleocytoplasmic Distribution and Gene Expression Are Regulated by Light Quality in the Fern *Adiantum capillus-veneris*, 81–95

Squash
W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423

***Sst1* genes**
R. S. van der Hoeven, A. J. Monforte, D. Breeden, S. D. Tanksley, and J. C. Steffens: Genetic Control and Evolution of Sesquiterpene Biosynthesis in *Lycopersicon esculentum* and *L. hirsutum*, 2283–2294

Stamen development
M. Kotilainen, P. Elomaa, A. Uimari, V. A. Albert, D. Yu, and T. H. Teeri: *GRCD1*, an *AGL2*-like MADS Box Gene, Participates in the C Function during Stamen Development in *Gerbera hybrida*, 1893–1902

Stamen-hair cells
J. W. Vos, F. Safadi, A. S. N. Reddy, and P. K. Hepler: The Kinesin-like Calmodulin Binding Protein Is Differentially Involved in Cell Division, 979–990

Sterol biosynthesis
A. C. Diener, H. Li, W.-x. Zhou, W. J. Whoriskey, W. D. Nes, and G. R. Fink: *STEROL METHYLTRANSFERASE 1* Controls the Level of Cholesterol in Plants, 853–870

STEROL METHYLTRANSFERASE 1
A. C. Diener, H. Li, W.-x. Zhou, W. J. Whoriskey, W. D. Nes, and G. R. Fink: *STEROL METHYLTRANSFERASE 1* Controls the Level of Cholesterol in Plants, 853–870

***stichel* mutant**
J. Mathur and N.-H. Chua: Microtubule Stabilization Leads to Growth Reorientation in Arabidopsis Trichomes, 465–477

Stigma/stylar cysteine-rich adhesin
J.-C. Mollet, S.-Y. Park, E. A. Nothnagel, and E. M. Lord: A Lily Stylar Pectin Is Necessary for Pollen Tube Adhesion to an in Vitro Stylar Matrix, 1737–1749

Stomata
M. Geisler, J. Nadeau, and F. D. Sack: Oriented Asymmetric Divisions That Generate the Stomatal Spacing Pattern in Arabidopsis Are Disrupted by the *too many mouths* Mutation, 2075–2086

Stomates
R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546

Strawberry
A. Aharoni, L. C. P. Keizer, H. J. Bouwmeester, Z. Sun, M. Alvarez-Huerta, H. A. Verhoeven, J. Blaas, A. M. M. L. van Houwelingen, R. C. H. De Vos, H. van der Voet, R. C. Jansen, M. Guis, J. Mol, R. W. Davis, M. Schena, A. J. van Tunen, and A. P. O'Connell: Identification of the *SAAT* Gene Involved in Strawberry Flavor Biogenesis by Use of DNA Microarrays, 647–661
S. L. Harmer and S. A. Kay: Microarrays: Determining the Balance of Cellular Transcription (In This Issue), 613–615

Striga asiatica
R. C. O'Malley and D. G. Lynn: Expansin Message Regulation in Parasitic Angiosperms: Marking Time in Development, 1455–1465

Styles
J.-C. Mollet, S.-Y. Park, E. A. Nothnagel, and E. M. Lord: A Lily Stylar Pectin Is Necessary for Pollen Tube Adhesion to an in Vitro Stylar Matrix, 1737–1749
S.-Y. Park, G.-Y. Jauh, J.-C. Mollet, K. J. Eckard, E. A. Nothnagel, L. L. Walling, and E. M. Lord: A Lipid Transfer–like Protein Is Necessary for Lily Pollen Tube Adhesion to an in Vitro Stylar Matrix, 151–163

Substrate–enzyme colocalization
K. Vissenberg, I. M. Martinez-Vilchez, J.-P. Verbelen, J. G. Miller, and S. C. Fry: In Vivo Colocalization of Xyloglucan Endotransglycosylase Activity and Its Donor Substrate in the Elongation Zone of Arabidopsis Roots, 1229–1237

Sucrose sensors
L. Barker, C. Kühn, A. Weise, A. Schulz, C. Gebhardt, B. Hirner, H. Hellmann, W. Schulze, J. M. Ward, and W. B. Frommer: SUT2, a Putative Sucrose Sensor in Sieve Elements, 1153–1164

Sugar transporters
L. Barker, C. Kühn, A. Weise, A. Schulz, C. Gebhardt, B. Hirner, H. Hellmann, W. Schulze, J. M. Ward, and W. B. Frommer: SUT2, a Putative Sucrose Sensor in Sieve Elements, 1153–1164
A. Weise, L. Barker, C. Kühn, S. Lalonde, H. Buschmann, W. B. Frommer, and J. M. Ward: A New Subfamily of Sucrose Transporters, SUT4, with Low Affinity/High Capacity Localized in Enucleate Sieve Elements of Plants, 1345–1355
R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546

Sugarcane
A. H. Paterson, J. E. Bowers, M. D. Burow, X. Draye, C. G. Elsik, C.-X. Jiang, C. S. Katsar, T.-H. Lan, Y.-R. Lin, R. Ming, and R. J. Wright: Comparative Genomics of Plant Chromosomes, 1523–1539

Sulforhodamine
K. Vissenberg, I. M. Martinez-Vilchez, J.-P. Verbelen, J. G. Miller, and S. C. Fry: In Vivo Colocalization of Xyloglucan Endotransglycosylase Activity and Its Donor Substrate in the Elongation Zone of Arabidopsis Roots, 1229–1237

***SUPERCENTIPEDE1* gene**
J. S. Parker, A. C. Cavell, L. Dolan, K. Roberts, and C. S. Grierson: Genetic Interactions during Root Hair Morphogenesis in Arabidopsis, 1961–1974
***SUPERMAN* gene**
H. Sakai, B. A. Krizek, S. E. Jacobsen, and E. M. Meyerowitz: Regulation of *SUP* Expression Identifies Multiple Regulators Involved in Arabidopsis Floral Meristem Development, 1607–1618
Suppressor mutations
H. Onouchi, M. I. Igeño, C. Périlleux, K. Graves, and G. Coupland: Mutagenesis of Plants Overexpressing *CONSTANS* Demonstrates Novel Interactions among Arabidopsis Flowering-Time Genes, 885–900
Sweetpotato whitefly
W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423
Syncytial-type cell plates
G. Jürgens: Cytokinesis: The Art of Partitioning (In This Issue), 827–829
M. Otegui and L. A. Staehelin: Syncytial-Type Cell Plates: A Novel Kind of Cell Plate Involved in Endosperm Cellularization of Arabidopsis, 933–947
Systemic acquired resistance
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290
M. Kinkema, W. Fan, and X. Dong: Nuclear Localization of NPR1 Is Required for Activation of *PR* Gene Expression, 2339–2350
H. B. Smith: Signal Transduction in Systemic Acquired Resistance (In This Issue), 179–181
Systemic necrosis
P. Xu and M. J. Roossinck: Cucumber Mosaic Virus D Satellite RNA–Induced Programmed Cell Death in Tomato, 1079–1092

T

TATA binding protein
S. Pan, E. Czarnecka-Verner, and W. B. Gurley: Role of the TATA Binding Protein–Transcription Factor IIB Interaction in Supporting Basal and Activated Transcription in Plant Cells, 125–135
tBP-80
X. Cao, S. W. Rogers, J. Butler, L. Beevers, and J. C. Rogers: Structural Requirements for Ligand Binding by a Probable Plant Vacuolar Sorting Receptor, 493–506
Telomeres
M. J. Orbach, L. Farrall, J. A. Sweigard, F. G. Chumley, and B. Valent: A Telomeric Avirulence Gene Determines Efficacy for the Rice Blast Resistance Gene *Pi-ta*, 2019–2032
Teosinte
P. Zhang, S. Chopra, and T. Peterson: A Segmental Gene Duplication Generated Differentially Expressed *myb*-Homologous Genes in Maize, 2311–2322
TGA proteins
C. Després, C. DeLong, S. Glaze, E. Liu, and P. R. Fobert: The Arabidopsis NPR1/NIM1 Protein Enhances the DNA Binding Activity of a Subgroup of the TGA Family of bZIP Transcription Factors, 279–290
H. B. Smith: Signal Transduction in Systemic Acquired Resistance (In This Issue), 179–181
Thermotolerance
W. B. Gurley: HSP101: A Key Component for the Acquisition of Thermotolerance in Plants (In This Issue), 457–460
C. Queitsch, S.-W. Hong, E. Vierling, and S. Lindquist: Heat Shock Protein 101 Plays a Crucial Role in Thermotolerance in Arabidopsis, 479–492
S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582
Thylakoid membranes
M. Lindahl, C. Spetea, T. Hundal, A. B. Oppenheim, Z. Adam, and B. Andersson: The Thylakoid FtsH Protease Plays a Role in the Light-Induced Turnover of the Photosystem II D1 Protein, 419–431
W. Majeran, F.-A. Wollman, and O. Vallon: Evidence for a Role of ClpP in the Degradation of the Chloroplast Cytochrome b_6f Complex, 137–149
J.-B. Peltier, G. Friso, D. E. Kalume, P. Roepstorff, F. Nilsson, I. Adamska, and K. J. van Wijk: Proteomics of the Chloroplast: Systematic Identification and Targeting Analysis of Lumenal and Peripheral Thylakoid Proteins, 319–341
Tip growth
R. Catoira, C. Galera, F. de Billy, R. V. Penmetsa, E.-P. Journet, F. Maillet, C. Rosenberg, D. Cook, C. Gough, and J. Dénarié: Four Genes of *Medicago truncatula* Controlling Components of a Nod Factor Transduction Pathway, 1647–1665
I. B. Heath and A. Geitmann: Cell Biology of Plant and Fungal Tip Growth, Getting to the Point (Meeting Report), 1513–1517. Correction, 2295
TIP protein
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925
Tissue tropism
M. R. Morra and I. T. D. Petty: Tissue Specificity of Geminivirus Infection Is Genetically Determined, 2259–2270
***TITAN5* gene**
J. McElver, D. Patton, M. Rumbaugh, C.-m. Liu, L. J. Yang, and D. Meinke: The *TITAN5* Gene of Arabidopsis Encodes a Protein Related to the ADP Ribosylation Factor Family of GTP Binding Proteins, 1379–1392
Tobacco
M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201
G. Cai, S. Romagnoli, A. Moscatelli, E. Ovidi, G. Gambellini, A. Tiezzi, and M. Cresti: Identification and Characterization of a Novel Microtubule-Based Motor Associated with Membranous Organelles in Tobacco Pollen Tubes, 1719–1736
P. D. Cerdán, R. J. Staneloni, J. Ortega, M. M. Bunge, M. J. Rodriguez-Batiller, R. A. Sánchez, and J. J. Casal: Sustained but Not Transient Phytochrome A Signaling Targets a Region of an *Lhcb1*2* Promoter Not Necessary for Phytochrome B Action, 1203–1211
S. G. Cessna, V. E. Sears, M. B. Dickman, and P. S. Low: Oxalic Acid, a Pathogenicity Factor for *Sclerotinia sclerotiorum*, Suppresses the Oxidative Burst of the Host Plant, 2191–2199
M.-E. Chabouté, B. Clément, M. Sekine, G. Philipps, and N. Chaubet-Gigot: Cell Cycle Regulation of the Tobacco Ribonucleotide Reductase Small Subunit Gene Is Mediated by E2F-like Elements, 1987–1999
D. A. Collings, C. N. Carter, J. C. Rink, A. C. Scott, S. E. Wyatt, and N. S. Allen: Plant Nuclei Can Contain Extensive Grooves and Invaginations, 2425–2439
G. Creissen, J. Fermin, M. Fryer, B. Kular, N. Leyland, H. Reynolds, G. Pastori, F. Wellburn, N. Baker, A. Wellburn, and P. Mulineau: Elevated Glutatione Biosynthetic Capacity in the Chloroplasts of Transgenic Tobacco Paradoxically Causes Increased Oxidative Stress: Correction [**11,** 1277–1291], 301
P. Döring, E. Treuter, C. Kistner, R. Lyck, A. Chen, and L. Nover: The Role of AHA Motifs in the Activator Function of Tomato Heat Stress Transcription Factors HsfA1 and HsfA2, 265–278
W. E. Durrant, O. Rowland, P. Piedras, K. E. Hammond-Kosack, and J. D. G. Jones: cDNA-AFLP Reveals a Striking Overlap in Race-Specific Resistance and Wound Response Gene Expression Profiles, 963–977
J. Fukazawa, T. Sakai, S. Ishida, I. Yamaguchi, Y. Kamiya, and Y. Takahashi: REPRESSION OF SHOOT GROWTH, a bZIP Transcriptional Activator, Regulates Cell Elongation by Controlling the Level of Gibberellins, 901–915
H. Hirochika, H. Okamoto, and T. Kakutani: Silencing of Retrotransposons in Arabidopsis and Reactivation by the *ddm1* Mutation, 357–368
M. Mikołajczyk, O. S. Awotunde, G. Muszyńska, D. F. Klessig, and G. Dobrowolska: Osmotic Stress Induces Rapid Activation of a Salicylic Acid–Induced Protein Kinase and a Homolog of Protein Kinase ASK1 in Tobacco Cells, 165–178. Correction, 611

P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235

T. Romeis, P. Piedras, and J. D. G. Jones: Resistance Gene-Dependent Activation of a Calcium-Dependent Protein Kinase in the Plant Defense Response, 803–815

S. Seo, M. Okamoto, T. Iwai, M. Iwano, K. Fukui, A. Isogai, N. Nakajima, and Y. Ohashi: Reduced Levels of Chloroplast FtsH Protein in Tobacco Mosaic Virus–Infected Tobacco Leaves Accelerate the Hypersensitive Reaction, 917–932

L. Shan, V. K. Thara, G. B. Martin, J.-M. Zhou, and X. Tang: The Pseudomonas AvrPto Protein Is Differentially Recognized by Tomato and Tobacco and Is Localized to the Plant Plasma Membrane, 2323–2337

K. Sugimoto, S. Takeda, and H. Hirochika: MYB-Related Transcription Factor NtMYB2 Induced by Wounding and Elicitors is a Regulator of the Tobacco Retrotransposon *Tto1* and Defense-Related Genes, 2511–2527

T. Vernoux, R. C. Wilson, K. A. Seeley, J.-P. Reichheld, S. Muroy, S. Brown, S. C. Maughan, C. S. Cobbett, M. Van Montagu, D. Inzé, M. J. May, and Z. R. Sung: The *ROOT MERISTEMLESS1/CADMIUM SENSITIVE2* Gene Defines a Glutathione-Dependent Pathway Involved in Initiation and Maintenance of Cell Division during Postembryonic Root Development, 97–109

K. Vissenberg, I. M. Martinez-Vilchez, J.-P. Verbelen, J. G. Miller, and S. C. Fry: In Vivo Colocalization of Xyloglucan Endotransglycosylase Activity and Its Donor Substrate in the Elongation Zone of Arabidopsis Roots, 1229–1237

Y. Wang, G. Duby, B. Purnelle, and M. Boutry: Tobacco *VDL* Gene Encodes a Plastid DEAD Box RNA Helicase and Is Involved in Chloroplast Differentiation and Plant Morphogenesis, 2129–2142

A. Weber, J. C. Servaites, D. R. Geiger, H. Kofler, D. Hille, F. Gröner, U. Hebbeker, and U.-I. Flügge: Identification, Purification, and Molecular Cloning of a Putative Plastidic Glucose Translocator, 787–801

R. Zhao, V. Dielen, J.-M. Kinet, and M. Boutry: Cosuppression of a Plasma Membrane H^+-ATPase Isoform Impairs Sucrose Translocation, Stomatal Opening, Plant Growth, and Male Fertility, 535–546

Tobacco etch virus

S. A. Whitham, R. J. Anderberg, S. T. Chisholm, and J. C. Carrington: Arabidopsis *RTM2* Gene Is Necessary for Specific Restriction of Tobacco Etch Virus and Encodes an Unusual Small Heat Shock–like Protein, 569–582

Tobacco mosaic virus

S. Seo, M. Okamoto, T. Iwai, M. Iwano, K. Fukui, A. Isogai, N. Nakajima, and Y. Ohashi: Reduced Levels of Chloroplast FtsH Protein in Tobacco Mosaic Virus–Infected Tobacco Leaves Accelerate the Hypersensitive Reaction, 917–932

Tomato

L. Barker, C. Kühn, A. Weise, A. Schulz, C. Gebhardt, B. Hirner, H. Hellmann, W. Schulze, J. M. Ward, and W. B. Frommer: SUT2, a Putative Sucrose Sensor in Sieve Elements, 1153–1164

P. Döring, E. Treuter, C. Kistner, R. Lyck, A. Chen, and L. Nover: The Role of AHA Motifs in the Activator Function of Tomato Heat Stress Transcription Factors HsfA1 and HsfA2, 265–278

Y.-Q. Gu, C. Yang, V. K. Thara, J. Zhou, and G. B. Martin: *Pti4* Is Induced by Ethylene and Salicylic Acid, and Its Product Is Phosphorylated by the Pto Kinase, 771–785

C.-F. Hwang, A. V. Bhakta, G. M. Truesdell, W. M. Pudlo, and V. M. Williamson: Evidence for a Role of the N Terminus and Leucine-Rich Repeat Region of the *Mi* Gene Product in Regulation of Localized Cell Death, 1319–1329

T. Meindl, T. Boller, and G. Felix: The Bacterial Elicitor Flagellin Activates Its Receptor in Tomato Cells According to the Address–Message Concept, 1783–1794

D. Reinhardt, T. Mandel, and C. Kuhlemeier: Auxin Regulates the Initiation and Radial Position of Plant Lateral Organs, 507–518

L. Shan, V. K. Thara, G. B. Martin, J.-M. Zhou, and X. Tang: The Pseudomonas AvrPto Protein Is Differentially Recognized by Tomato and Tobacco and Is Localized to the Plant Plasma Membrane, 2323–2337

A. Weise, L. Barker, C. Kühn, S. Lalonde, H. Buschmann, W. B. Frommer, and J. M. Ward: A New Subfamily of Sucrose Transporters, SUT4, with Low Affinity/High Capacity Localized in Enucleate Sieve Elements of Plants, 1345–1355

P. Xu and M. J. Roossinck: Cucumber Mosaic Virus D Satellite RNA–Induced Programmed Cell Death in Tomato, 1079–1092

Tomato golden mosaic virus

M. R. Morra and I. T. D. Petty: Tissue Specificity of Geminivirus Infection Is Genetically Determined, 2259–2270

***too many mouths* mutant**

M. Geisler, J. Nadeau, and F. D. Sack: Oriented Asymmetric Divisions That Generate the Stomatal Spacing Pattern in Arabidopsis Are Disrupted by the *too many mouths* Mutation, 2075–2086

Tradescantia virginiana

J. W. Vos, F. Safadi, A. S. N. Reddy, and P. K. Hepler: The Kinesin-like Calmodulin Binding Protein Is Differentially Involved in Cell Division, 979–990

Trafficking

N. A. Eckardt: Green Light for Traffic in the Early Secretory Pathway (In This Issue), 2009–2011

Transcription

T. D. Bunney, P. A. C. Watkins, A. F. Beven, P. J. Shaw, L. E. Hernandez, G. P. Lomonossoff, M. Shanks, J. Peart, and B. K. Drøbak: Association of Phosphatidylinositol 3-Kinase with Nuclear Transcription Sites in Higher Plants, 1679–1687

M.-E. Chabouté, B. Clément, M. Sekine, G. Philipps, and N. Chaubet-Gigot: Cell Cycle Regulation of the Tobacco Ribonucleotide Reductase Small Subunit Gene Is Mediated by E2F-like Elements, 1987–1999

I. Heilmann, J. Stevenson-Paulik, and I. Y. Perera: Plant PtdIns 3-Kinase Goes Nuclear (In This Issue), 1511–1512

Z. Jasencakova, A. Meister, J. Walter, B. M. Turner, and I. Schubert: Histone H4 Acetylation of Euchromatin and Heterochromatin Is Cell Cycle Dependent and Correlated with Replication Rather Than with Transcription, 2087–2100

S. Pan, E. Czarnecka-Verner, and W. B. Gurley: Role of the TATA Binding Protein–Transcription Factor IIB Interaction in Supporting Basal and Activated Transcription in Plant Cells, 125–135

Transcription factors

W. Bruce, O. Folkerts, C. Garnaat, O. Crasta, B. Roth, and B. Bowen: Expression Profiling of the Maize Flavonoid Pathway Genes Controlled by Estradiol-Inducible Transcription Factors CRC and P, 65–79

S. Y. Fujimoto, M. Ohta, A. Usui, H. Shinshi, and M. Ohme-Takagi: Arabidopsis Ethylene-Responsive Element Binding Factors Act as Transcriptional Activators or Repressors of GCC Box–Mediated Gene Expression, 393–404

S. Pan, E. Czarnecka-Verner, and W. B. Gurley: Role of the TATA Binding Protein–Transcription Factor IIB Interaction in Supporting Basal and Activated Transcription in Plant Cells, 125–135

C. Spelt, F. Quattrocchio, J. N. M. Mol, and R. Koes: *anthocyanin1* of Petunia Encodes a Basic Helix-Loop-Helix Protein That Directly Activates Transcription of Structural Anthocyanin Genes, 1619–1631

S. Yalovsky, M. Rodríguez-Concepción, K. Bracha, G. Toledo-Ortiz, and W. Gruissem: Prenylation of the Floral Transcription Factor APETALA1 Modulates Its Function, 1257–1266

Transcriptional activator

D. Desveaux, C. Després, A. Joyeux, R. Subramaniam, and N. Brisson: PBF-2 Is a Novel Single-Stranded DNA Binding Factor Implicated in *PR-10a* Gene Activation in Potato, 1477–1489

J. Fukazawa, T. Sakai, S. Ishida, I. Yamaguchi, Y. Kamiya, and Y. Takahashi: REPRESSION OF SHOOT GROWTH, a bZIP Transcriptional Activator, Regulates Cell Elongation by Controlling the Level of Gibberellins, 901–915

Transcriptional gene silencing

A. Steimer, P. Amedeo, K. Afsar, P. Fransz, O. M. Scheid, and J. Paszkowski: Endogenous Targets of Transcriptional Gene Silencing in Arabidopsis, 1165–1178

T. L. Stokes and E. J. Richards: Mum's the Word: MOM and Modifiers of Transcriptional Gene Silencing (In This Issue), 1003–1006

Transgenes
T. Dalmay, A. Hamilton, E. Mueller, and D. C. Baulcombe: *Potato Virus X* Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing, 369–379
M. N. Raizada and V. Walbot: The Late Developmental Pattern of *Mu* Transposon Excision Is Conferred by a Cauliflower Mosaic Virus 35S–Driven MURA cDNA in Transgenic Maize, 5–21
A. Steimer, P. Amedeo, K. Afsar, P. Fransz, O. M. Scheid, and J. Paszkowski: Endogenous Targets of Transcriptional Gene Silencing in Arabidopsis, 1165–1178
T. L. Stokes and E. J. Richards: Mum's the Word: MOM and Modifiers of Transcriptional Gene Silencing (In This Issue), 1003–1006
Translation elongation
L. Zhang, V. Paakkarinen, K. J. van Wijk, and E.-M. Aro: Biogenesis of the Chloroplast-Encoded D1 Protein: Regulation of Translation Elongation, Insertion, and Assembly into Photosystem II, 1769–1781
Translational enhancement
J. Ling, D. R. Wells, R. L. Tanguay, L. F. Dickey, W. F. Thompson, and D. R. Gallie: Heat Shock Protein HSP101 Binds to the *Fed-1* Internal Light Regulatory Element and Mediates Its High Translational Activity, 1213–1227
Transmitting tract
S.-Y. Park, G.-Y. Jauh, J.-C. Mollet, K. J. Eckard, E. A. Nothnagel, L. L. Walling, and E. M. Lord: A Lipid Transfer–like Protein Is Necessary for Lily Pollen Tube Adhesion to an in Vitro Stylar Matrix, 151–163
TRANSPARENT TESTA8
N. Nesi, I. Debeaujon, C. Jond, G. Pelletier, M. Caboche, and L. Lepiniec: The *TT8* Gene Encodes a Basic Helix-Loop-Helix Domain Protein Required for Expression of *DFR* and *BAN* Genes in Arabidopsis Siliques, 1863–1878
Transporter genes
B. Gillissen, L. Bürkle, B. André, C. Kühn, D. Rentsch, B. Brandl, and W. B. Frommer: A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis, 291–300
Transposon tagging
M. N. Raizada and V. Walbot: The Late Developmental Pattern of *Mu* Transposon Excision Is Conferred by a Cauliflower Mosaic Virus 35S–Driven MURA cDNA in Transgenic Maize, 5–21
Transposons
M. Running, M. Scanlon, and N. Sinha: Maize Genetics 2000—And Beyond (Meeting Report), 829–835
Trichomes
J. Mathur and N.-H. Chua: Microtubule Stabilization Leads to Growth Reorientation in Arabidopsis Trichomes, 465–477
Triticeae
J. S. Heslop-Harrison: Comparative Genome Organization in Plants: From Sequence and Markers to Chromatin and Chromosomes, 617–635
Turgor
E. Thines, R. W. S. Weber, and N. J. Talbot: MAP Kinase and Protein Kinase A–Dependent Mobilization of Triacylglycerol and Glycogen during Appressorium Turgor Generation by *Magnaporthe grisea*, 1703–1718
Turnip crinkle virus
M. B. Cooley, S. Pathirana, H.-J. Wu, P. Kachroo, and D. F. Klessig: Members of the Arabidopsis *HRT/RPP8* Family of Resistance Genes Confer Resistance to Both Viral and Oomycete Pathogens, 663–676
P. Kachroo, K. Yoshioka, J. Shah, H. K. Dooner, and D. F. Klessig: Resistance to Turnip Crinkle Virus in Arabidopsis Is Regulated by Two Host Genes and Is Salicylic Acid Dependent but *NPR1*, Ethylene, and Jasmonate Independent, 677–690
T. Ren, F. Qu, and T. J. Morris: *HRT* Gene Function Requires Interaction between a NAC Protein and Viral Capsid Protein to Confer Resistance to Turnip Crinkle Virus, 1917–1925

U

***UNIFOLIATA* gene**
C. W. Gourlay, J. M. I. Hofer, and T. H. N. Ellis: Pea Compound Leaf Architecture Is Regulated by Interactions among the Genes *UNIFOLIATA*, *COCHLEATA*, *AFILA*, and *TENDRILLESS*, 1279–1294
UV radiation
J. Hidema, T. Kumagai, and B. M. Sutherland: UV Radiation–Sensitive Norin 1 Rice Contains Defective Cyclobutane Pyrimidine Dimer Photolyase, 1569–1578
L. Loyall, K. Uchida, S. Braun, M. Furuya, and H. Frohnmeyer: Glutathione and a UV Light–Induced Glutathione S-Transferase Are Involved in Signaling to Chalcone Synthase in Cell Cultures, 1939–1950

V

Vacuolar sorting
X. Cao, S. W. Rogers, J. Butler, L. Beevers, and J. C. Rogers: Structural Requirements for Ligand Binding by a Probable Plant Vacuolar Sorting Receptor, 493–506
K. Matsuoka: C-Terminal Propeptides and Vacuolar Sorting by BP-80–Type Proteins: Not All C-Terminal Propeptides Are Equal (Letter To The Editor), 181–182
***variegated and distorted leaf* mutant**
Y. Wang, G. Duby, B. Purnelle, and M. Boutry: Tobacco *VDL* Gene Encodes a Plastid DEAD Box RNA Helicase and Is Involved in Chloroplast Differentiation and Plant Morphogenesis, 2129–2142
Very-long-chain fatty acids
A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008
C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798
Vesicle trafficking
T. D. Bunney, P. A. C. Watkins, A. F. Beven, P. J. Shaw, L. E. Hernandez, G. P. Lomonossoff, M. Shanks, J. Peart, and B. K. Drøbak: Association of Phosphatidylinositol 3-Kinase with Nuclear Transcription Sites in Higher Plants, 1679–1687
Vesicular trafficking
P. Pimpl, A. Movafeghi, S. Coughlan, J. Denecke, S. Hillmer, and D. G. Robinson: In Situ Localization and in Vitro Induction of Plant COPI-Coated Vesicles, 2219–2235
Virus infection
Z. Havelda and A. J. Maule: Complex Spatial Responses to Cucumber Mosaic Virus Infection in Susceptible *Cucurbita pepo* Cotyledons, 1975–1985
Viruses
M. R. Morra and I. T. D. Petty: Tissue Specificity of Geminivirus Infection Is Genetically Determined, 2259–2270
Virus-induced gene silencing
R. A. Burton, D. M. Gibeaut, A. Bacic, K. Findlay, K. Roberts, A. Hamilton, D. C. Baulcombe, and G. B. Fincher: Virus-Induced Silencing of a Plant Cellulose Synthase Gene, 691–705

W

Water stress
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
Waxes
A. Fiebig, J. A. Mayfield, N. L. Miley, S. Chau, R. L. Fischer, and D. Preuss: Alterations in *CER6*, a Gene Identical to *CUT1*, Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems, 2001–2008
C. Mariani and M. Wolters-Arts: Complex Waxes (In This Issue), 1795–1798
Wheat
K. M. Devos and M. D. Gale: Genome Relationships: The Grass Model in Current Research, 637–646
***WIG* gene**
C. Jonak, D. Beisteiner, J. Beyerly, and H. Hirt: Wound-Induced Expression and Activation of WIG, a Novel Glycogen Synthase Kinase 3, 1467–1475
Wound response
C. Wang, C. A. Zien, M. Afitlhile, R. Welti, D. F. Hildebrand, and X. Wang: Involvement of Phospholipase D in Wound-Induced Accumulation of Jasmonic Acid in Arabidopsis, 2237–2246

Wounding
C. Jonak, D. Beisteiner, J. Beyerly, and H. Hirt: Wound-Induced Expression and Activation of WIG, a Novel Glycogen Synthase Kinase 3, 1467–1475
T. Pechan, L. Ye, Y.-m. Chang, A. Mitra, L. Lin, F. M. Davis, W. P. Williams, and D. S. Luthe: A Unique 33-kD Cysteine Proteinase Accumulates in Response to Larval Feeding in Maize Genotypes Resistant to Fall Armyworm and Other Lepidoptera, 1031–1040
P. Reymond, H. Weber, M. Damond, and E. E. Farmer: Differential Gene Expression in Response to Mechanical Wounding and Insect Feeding in Arabidopsis, 707–719
K. Sugimoto, S. Takeda, and H. Hirochika: MYB-Related Transcription Factor NtMYB2 Induced by Wounding and Elicitors is a Regulator of the Tobacco Retrotransposon *Tto1* and Defense-Related Genes, 2511–2527
W. T. G. van de Ven, C. S. LeVesque, T. M. Perring, and L. L. Walling: Local and Systemic Changes in Squash Gene Expression in Response to Silverleaf Whitefly Feeding, 1409–1423

X

Xenobiotic resistance
C. Thomas, A. Rajagopal, B. Windsor, R. Dudler, A. Lloyd, and S. J. Roux: A Role for Ectophosphatase in Xenobiotic Resistance, 519–533
Xyloglucan endotransglycosylase
K. Vissenberg, I. M. Martinez-Vilchez, J.-P. Verbelen, J. G. Miller, and S. C. Fry: In Vivo Colocalization of Xyloglucan Endotransglycosylase Activity and Its Donor Substrate in the Elongation Zone of Arabidopsis Roots, 1229–1237

Y

Yeast
M. Benghezal, G. O. Wasteneys, and D. A. Jones: The C-Terminal Dilysine Motif Confers Endoplasmic Reticulum Localization to Type I Membrane Proteins in Plants, 1179–1201
P. Döring, E. Treuter, C. Kistner, R. Lyck, A. Chen, and L. Nover: The Role of AHA Motifs in the Activator Function of Tomato Heat Stress Transcription Factors HsfA1 and HsfA2, 265–278
L. Essers, R. H. Adolphs, and R. Kunze: A Highly Conserved Domain of the Maize *Activator* Transposase Is Involved in Dimerization, 211–223
B. Gillissen, L. Bürkle, B. André, C. Kühn, D. Rentsch, B. Brandl, and W. B. Frommer: A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis, 291–300
J. Ling, D. R. Wells, R. L. Tanguay, L. F. Dickey, W. F. Thompson, and D. R. Gallie: Heat Shock Protein HSP101 Binds to the *Fed-1* Internal Light Regulatory Element and Mediates Its High Translational Activity, 1213–1227
C. Thomas, A. Rajagopal, B. Windsor, R. Dudler, A. Lloyd, and S. J. Roux: A Role for Ectophosphatase in Xenobiotic Resistance, 519–533
***yellow-in-the-dark* mutants**
A. B. Cahoon and M. P. Timko: *yellow-in-the-dark* Mutants of Chlamydomonas Lack the CHLL Subunit of Light-Independent Protochlorophyllide Reductase, 559–568

Z

ZmPRO5 protein
D. R. Kovar, B. K. Drøbak, and C. J. Staiger: Maize Profilin Isoforms Are Functionally Distinct, 583–598
***ZmSCR* gene**
J. Lim, Y. Helariutta, C. D. Specht, J. Jung, L. Sims, W. B. Bruce, S. Diehn, and P. N. Benfey: Molecular Analysis of the *SCARECROW* Gene in Maize Reveals a Common Basis for Radial Patterning in Diverse Meristems, 1307–1318
***zwichel* mutant**
J. Mathur and N.-H. Chua: Microtubule Stabilization Leads to Growth Reorientation in Arabidopsis Trichomes, 465–477